WEST Search History

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DATE: Monday, January 12, 2004

Hide?	Set Nam	e Query	Hit Count
	DB=PC	GPB, USPT, EPAB, JPAB, DWPI; PLUR=YES; OP=OR	
	L7	L6 not (14 or 15)	3
	L6	13 and 12	3
	L5	zaremba-sam\$.in.	2
	L4	barzaga-elene\$.in.	1
	L3	schlom-jeffrey\$.in.	32
	L2	(cea or (carcinoembroyic adj antigen))adj5 vaccine\$	29
	L1	cea and vaccine\$	1139

END OF SEARCH HISTORY

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Result
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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neuropeptide Grb-A Ig mu chain V regi

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Query marc Best Local Matches Qy	RESULT 2 PC2370 probable H+ N/Alternate C/Species: C/Jate: 20- C/Accession R/Matsuno, Biosci. Bio A/Title: Id A/Reference A/Recession A/Status: p A/Molecule A/Residues: C/Keywords:	Query Matc Best Local Matches Qy	RESULT 1 PT0542 C;Species: M C;Date: 17-J C;Accession: R;Feeney, Med. A;Title: Jun A;Accession: A;Accession: A;Accession: A;Reference A;Accession: A;Status: tr A;Molecule tr A;Residues: A;Experiment C;Keywords:		66666666666666666666666666666666666666
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C;Species: Gryllus bimaculatus (two-spotted cricket)
C;Date: 26-Jan-1996 #sequence_revision 26-Jan-1996 #text_change 2
C;Accession: A57444
R;Lorenz, M.W.; Kellner, R.; Hoffmann, K.H.
J. Biol. Chem. 270, 21103-21108, 1995
A;Title: A family of neuropeptides that inhibit juvenile hormone A;Reference number: A57444; MUID:95403341; PMID:7673141
A;Accession: A57444
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C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #
C;Accession: JS0318
R;Holman, G.M.; Cook, B.J.; Nachman, R.J.
Comp. Biochem. Physiol. C 88, 31-34, 1987
A;Title: Isolation, primary structure and synthesis A;Reference number: JS0317
A;Accession: JS0318
                                                                                                                A;Status: preliminary
A;Molecule type: proto
A;Residues: 1-9 <LOR>
                                                                                                                                                                                                                                                                neuropeptide Grb-AST B1 - two-spotted cricket
C;Species: Gryllus bimaculatus (two-spotted cricket)
C;Date: 26-Jan-1996 #sequence_revision 26-Jan-1996 #
C;Accession: A57444
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A; Residues: 1-9 <SCH>
A; Residues: 1-9 <SCH>
C; Comment: This peptide hormone suppresses spontaneous contractions
C; Superfamily: locustamyoinhibiting peptide
C; Keywords: amidated carboxyl end; hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Schoofs, L.; Holman, G.M.; Hayes, T.K.; Nachman, R.J.; De Loof, A. Regul. Pept. 36, 111-119, 1991
A;Title: Isolation, identification and synthesis of locustamyoinhibiting peptide A;Reference number: A60065; MUID:92179466; PMID:1796179
A;Accession: A60065
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                   A; Molecule type: mRNA
A; Residues: 1-5 < FEE>
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A; Residues: 1-9 < WHI>
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R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T ce
A;Total Junctional sequences of fetal T ce
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C;Date: 02-Jul-1996 #sequence_revision 31-Jul-1997 #text_change
C;Accession: I57550
C;Accession: I57550
R;Whitelaw, E.; Hogben, P.; Hanscombe, O.; Proudfoot, N.J.
Mol. Cell. Biol. 9, 241-251, 1989
A;Title: Transcriptional promiscuity of the human alpha-globin 9
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C;Species: Gryllus bimaculatus (two-spotted cricket)
C;Date: 26-Jan-1996 #sequence_revision 26-Jan-1996 #text_change 26-Jan-1996
C;Accession: B57444
                                                                                                                                  T-cell receptor beta chain V-D-J region (126-1L) - C;Species: Mus musculus (house mouse) C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 C;Accession: PT0540
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J. Biol. Chem. 270, 21103-21108, 1995
A;Tille: A family of neuropeptides that inhibit juvenile
A;Reference number: A57444; MUID:95403341; PMID:7673141
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A;Map position: 16p13.3-16p13.3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Accession: I57650
A;Status: translated from GB/EMBL/DDBJ
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1; PMID:1711558
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2.8e+05;
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R; Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A; Title: Junctional sequences of fetal T cell receptor beta A; Reference number: PT0509; MUID:91277601; PMID:1711558
A; Accession: PT0726
A; Accession: PT0726
                                                                                                                                                       RESULT 11
PT0676
                                                         T-cell receptor beta chain V-D-J region (140-1AL) - C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #C;Accession: PT0676
R;Feeney, A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    T-cell receptor beta chain V-D-J region (161-2D) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Decies: Mus musculus (house mouse) C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997 C;Accession: PT0726
                                                                                                                                                                                                                                                                                                                                                                             A;Experimental source: adult thymus, strain BALB/cC;Keywords: T-cell receptor
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A;Title: Junctional sequences of fetal T cell receptor beta chains A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0526
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C;Date: 17-Jul-1992 #sequence_revision
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                       J. Exp. Med. 174, 11
A; Title: Junctional
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A; Residues: 1-7 < FEE>
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Best Local :
Exp. Med. 174, 115-124, 1991
Title: Junctional sequences of fetal T cell receptor beta
Reference number: PT0509; MUID:91277601; PMID:1711558
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A;Title: Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH-2 neuropeptides A;Reference number: A41978; MUID:92196111; PMID:1549595
A;Accession: F41978
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F41978
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A;Title: The main features of the craniate mitochondrial DNA bett A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Accession: T13818
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                                                                                                                                                                                                                              A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-9 <DUV>
C;Keywords: amidated carboxyl end; neuropeptide
F;9/Modified site: amidated carboxyl end (Phe) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                             callipMRFamide 6 - bluebottle fly (Calliphora vomitoria)
C;Species: Calliphora vomitoria
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 17-Mar-1999
C;Accession: F41978
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C; Keywords: mitochondrion
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A; Residues: 1-8 < DEL>
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C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
C;Accession: PT0288
R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and A;Reference number: PT0222; MUID:91108337; PMID:1899102
A;Accession: PT0288
Search completed: January 12, 2004, 14:31:52 Job time: 12.25 secs
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                                                                                                                                                                                                                                                                                           A;Status: preliminary; not compared with conceptual translation A;Molecule type: DNA A;Residues: 1-9 <WHE> C;Keywords: T-cell receptor
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A;Title: Rearrangement and junctional-site sequence analyses of T-cell receptor gamma ge A;Reference number: A41946; MUID:92049316; PMID:1658619
A;Accession: G41946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T-cell receptor gamma chain (2t.23) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 07-May-1999
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A;Residues: 1-9 </AM>
A;Experimental source: B lymphocyte
C;Keywords: heterotetramer; immunoglobulin
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R; Whetsell, M.; Mos.
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Best Local Similarity 75.0
Matches 3; Conservative
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DSIF RABIT
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OXYA GOUAC
OXYT RACCU
PPH2 LYCES
CCKN MACEU
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PGIR DIAMB
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FAR3 HIRMS
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by chance to have a he result being printed, distribution.

Enterococcus faecalis (Streptococcus faecalis).
Bacteria; Firmicutes; Lactobacillales; Enteroco
NCBI_TaxID=1351;

Enterococcaceae; Enterococcus.

Sex pheromone 01-JAN-1990 (Rel. 01-JAN-1990 (Rel. 01-FEB-1991 (Rel.

cPD1

SEQUENCE.

SEQUENCE.

MEDLINE=85040388; PubMed=6436978;
SUZUKİ A., MORİ M., Sagakami Y., Isogai /
Craig R.A., Clewell D.B.;

Craig R.A., Clewell D.B.;

I "ISOLATION and structure of bacterial se
L Science 226:849-850(1984).

C -!- FUNCTION: CPD1 IS INVOLVED IN THE CO

Isogai

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CONJUGATIVE TRANSFER OF

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oryctolagus panagrellus cyprinus ca brassica na

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LEUMA STANDARD; PRT; 8 AA.

P19990;

01-FEB-1991 (Rel. 17, Created)

01-FEB-1991 (Rel. 17, Last sequence update)

01-FEB-1991 (Rel. 17, Last annotation update)

Leucokinin VIII (L-VIII).

Leucophaea maderae (Madeira cockroach).

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;

Elaberidae; Leucophaea.

P82156 P41861

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Mismatches

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8665B729C682C729 CRC64;

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homarus ame calliphora nephrops no

TISSUE-Head;
Holman G.M., Cook B.J., Nachman R.J.;
Holman G.M., Cook B.J., Nachman R.J.;
Holman G.M., primary structure and synthesis of leucokinins VII and
VIII: the final members of this new family of cephalomyotropic
peptides isolated from head extracts of Leucophaea maderae.";
Comp. Biochem. Physiol. 88C:31-34(1997).
-I-FUNCTION: THIS CEPHALOMYOTROPIC PEPTIDE STIMULATES CONTRACTILE
ACTIVITY OF COCKHOACH PROTODEUM (HINDGUT).
-I- SIMILARITY: TO THE OTHER LEUCOKININS.

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ALIGNMENTS

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Neuropeptide; Amidat:

MOD_RES 8
SEQUENCE 8 AA; 90:
                                                                                                                                                                                                                                                                         PTSP BOMMO STANDARD; PRT; 9 AA. P82003; 16-OCT-2001 (Rel. 40, Created) 16-OCT-2001 (Rel. 41, Last sequence update) 28-FEB-2003 (Rel. 41, Last annotation update) Prothoracicostatic peptide (Bom-PTSP). Bombyx mori (Silk moth).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          p31799;
01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
01-OCT-1993 (Rel. 27, Last annotation update)
1-OCT-1993 (Rel. 27, Last annotation update)
Locustamyoinhibiting peptide (LOM-MIP)
Locustamigratoria (Migratory locust)
Locusta migratoria (Migratory locust)
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Orthopteroidea; Orthoptera; Caeilfera; Acridomorpha;
                                         STRAIN=C145 X N140; TISSUE=Brain; MEDLINE=20002634; PubMed=10531308; Hua Y.-J., Tanaka Y., Nakamura K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-92179466; PubMed=1796179; Schoofs L., Holman G.M., Hayes T.K., Nachman R.J., de Loof A.; "Isolation, identification and synthesis of locustamyoinhibiting peptide (LOM-MIP), a novel biologically active neuropeptide from Locusta migratoria."; Regul. Pept. 36:111-119(1991).
                          Kataoka
                                                                                                                          SEQUENCE
                                                                                                                                                                 Bombycidae; Bombyx.
NCBI_TaxID=7091;
                                                                                                                                                                                                                     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia; Bombycoidea;
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NCBI_TaxID=7004;
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387D7DD4472AB6C3 CRC64;
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P82156;
30-MAY-2000
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Cydiastatin 5.
Cydia pomonella (Codling moth).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
                                                                                             CYDPO
                                                                                                                                                                                                                                                                                                      "Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH2 neuropeptides (designated callifMRFamides) from the blowfly Calliphora vomitoria.";
Proc. Natl. Acad. Sci. U.S.A. 89:2326-2330(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                         Calliphora vomitoria (Blue blowfly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
Calliphoridae; Calliphora.
NCBI_TaxID=27454;
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01-NOV-1995 (Rel. 32, Last seguence up
01-NOV-1995 (Rel. 32, Last annotation
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-!- SUBCELLULAR LOCATION: Secreted.
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Kataoka H.,
                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                 Neuropeptide;
MOD_RES
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Neuropeptide; Amidation.
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Rehfeld J.F., Thorpe A.;
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Duve H., Johnsen A.H., Sewell J.C.,
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                                (Rel. 39, Created)
(Rel. 39, Last sequence up
(Rel. 39, Last annotation
                                                                                                                                                                                       Conservative
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. 274:31169-31173(1999).
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                                                                                STANDARD;
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TO THE FARP (FMRFAMIDE RELATED PEPTIDE)
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96D10699CAB6D865 CRC64;
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Pred. No. 1.3e+05;
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Pred. No. 1.3e+05;
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Matches 3
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28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
FWRFamide-like neuropeptide FLP2 (ADXNFLRP-amide).
Macrobrachium rosenbergii (Giant fresh water prawn).
EMkaryota, Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Caridea;
Palaemonoidea; Palaemonidae; Macrobrachium.
                                                                            TISOT CYPCA
P4293;
01-NOV-1995
01-NOV-1995
01-NOV-1995
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Isotocin.
Cyprinus carpio (Common carp).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Neuropeptide; Amidation.
MOD_RES 8 8
SEQUENCE 8 AA; 1010 M
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dea; Tortricidae; Olethreutinae; Cydia.
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              Craniata; Vertebrata; Euteleostomi;
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              DSIP RABIT STANDARD;
P01158;
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InterPro; IPR000981; Neurhyp_horm.
Pfam; PF00220; hormone4; 1.
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                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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Acher R., Chauvet J., Chauvet M.-T., Crepy D.;
"Characterization of neurohypophyseal hormones from a fresh water bony
fish, the carp (Cyprinus carpio). Comparison with hormones from sea
water bony fishs.";
Comp. Biochem. Physiol. 14:245-254(1965).
-!- FUNCTION: ANTIDIURETIC HORMONE.
-!- SIMILARITY; BELONGS TO THE VASOPRESSIN/OXYTOCIN FAMILY.
                                                                                                                                                                                                                                                                                                              "Composition and role of tapetal lipid bodies pollen coat of Brassica napus."; planta 208:588-598(199).
-I- FUNCTION: MAY PLAY A STRUCTURAL ROLE IN TH-
-I- PLASTIDIAL LIPID ORGANELLE.
-I- TISSUE SPECIFICITY: TAPETUM OF ANTHERS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Spermatophyta; Magnoliophyta; eudicotyledons; coreurosids II; Brassicales; Brassicaceae; Brassica. NCBI_TaxID=3708;
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Brassica napus (Rape).

Eukaryota; Viridiplantaė; Streptophyta; Embryophyta;

Eukaryota; Magnoliophyta; eudicotyledons; core et
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P81707;
15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence up
30-MAY-2000 (Rel. 39, Last annotation
Plastidial lipid-associated protein (F
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Cyprinidae; Cyprinus.
NCBI_TaxID=7962;
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17FF476EB455B04B CRC64;
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MEDLINE=93027659; PubMed=1408999;
Geary T.G., Price D.A., Bowman J.W., Winterrowd C.A., Mackenzie C.D.,
Garrison R.D., Williams J.F., Friedman A.R.;
"Two FMRFamide-like peptides from the free-living nematode
Panagrellus redivivus.";
Peptides 13:209-214(1992).
-!- FUNCTION: MYOACTIVE.
-!- TISSUE SPECIFICITY: NERVE CORDS AND PAIRED GROUPS OF CELLS LOCATED
CAUDALLY TO THE BASE OF THE PHARYNX.
-!- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELATED PEPTIDE)
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16-OCT-2001 (Rel. 40, Last annotation update)
Delta sleep-inducing peptide (DSIP).
Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
FMRFamide-like neuropeptide PF2 (SADPNFLRF-amide).
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MEDLINE-79054421; PubMed=568769;

Schoenenberger G.A., Maider P.F., Tobler H.J., Wilson K., Monnier "The delta EEG (sleep)-inducing peptide (DSIP). XI. Amino-acid analysis, sequence, synthesis and activity of the nonapeptide.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Panagrellus redivivus.
Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida;
Panagrolaimoidea; Panagrolaimidae; Panagrellus.
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Graf M.V., Kastin A.J.;
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MISCELLANBOUS: THIS PEPTIDE WAS OBTAINED FROM DIALYSATES OF OCCIPITAL VENOUS SINUS BLOOD FROM RABBITS KEPT ASLEEP BY ELECTIONATION OF THE THALAMUS.
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NOTE=Issue 8 of March 2001;
WWW-http://www.expasy.org/spotlight/articles/sptlt008.html"
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Pred. No.
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MOD_RES
SEQUENCE 9 A
Raja clavata (Thornback ray).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchi; Squalea; Hypnosqualea; Pristiorajea; Batoidea;
Rajiformes; Rajidae; Raja.
NCBI TaxID=7781;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDINE=72128038; PubMed=4622083; Acher R., Chauvet J., Chauvet M.-T., Fontaine M.; Acher R., Chauvet J., Chauvet M.-T., Fontaine M.; acher R., Chauvet J., Chauvet M.-T., Fontaine M.; valitocin videntification of 2 new neurohypophyseal hormones, valitocin oxytocin) and aspartocin (Asn4-oxytocin) in a selachian fish, oxytocin) and aspartocin (Asn4-oxytocin) in a selachian fish, spiny dog-fish (Squalus acanthias).; C. R. Acad. Sci. D. Sci. Nat. 274:313-316(1972).

C. R. Acad. Sci. D. Sci. Nat. 274:313-316(1972).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MSDLINE=73031727; PubMed=5083097;
Acher R., Chauvet J., Chauvet M.-T.;
Reprinted From a cartilaginous fish, Squalus acanthias.";
Eur. J. Biochem. 29:12-19(1972).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aspartocin (Aspargtocin).
Squalus acanthias (Spiny dogfish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchii; Squalea; Squaloidei; Squalidae; Squalus.
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                                                                                                                                                   Glumitocin.
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Acher R., Chauvet J., Chauvet M.-T., Crepy D.;
Acher R., Chauvet J., Chauvet M.-T., Crepy D.;
"Phylogeny of neurophyophyseal poptides: isolation of a new hormone,
glumitocin (Ser 4-Gln 8-ocytocin) present in a cartilaginous fish,
the ray (Raia clavata).";
Biochim. Biophys. Acta 107:393-396(1965).
-!- SUNCION: ANTIDIURETIC HORMONE.
-!- SIMILARITY: BELONGS TO THE VASOPRESSIN/OXYTOCIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last sequence update)
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28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-20
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Matches 2
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01-APR-1993
15-SEP-2003
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Dasyurus viverrinus (Southeastern quoll).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Metatheria; Diprotodontia; Macropodidae; Macropus.
                                                                                                                                                                                                                                    MOD_RES
                                                                                                                                                                                                                                                                                                                                                          -I- FUNCTION: THIS PERTIDE HORMONE INDUCES GALL BLADDER CONTRACTION AND THE RELEASE OF PANCREATIC ENZYMES IN THE GUT. ITS FUNCTION IN THE BRAIN IS NOT CLEAR.
-I- SIMILARITY: BELONGS TO THE GASTRIN/CHOLECYSTOKININ FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=88234141; PubMed=3375140;
Fan Z.W., Eng J., Shaw G., Yalow R.S.;
"Cholecystokinin octapeptide purified from brains of Australian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chólecystokinin
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PROSITE; PS00259; GASTRIN; 1.
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Copyright (c) 1993 - 2004 Compugen Ltd.
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P82079 limnodynast
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01-DEC-2001 (T
TR4-NS orphan
        Limnodynastes
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"Comparison between intron-exon structures in Submitted (NOV-1997) to the EMBL/GenBank/DDBJ EMBL; AF045782; AAL58190.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2002 (TrEMBLrel 20, Created)
01-MAR-2002 (TrEMBLrel 20, Last sequence up
01-MAR-2002 (TrEMBLrel 20, Last annotation
X-linked zinc finger protein (Fragment).
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MEDLINE=96198747; PubMed=8612486;
Yoshikawa T., Makino S., Gao X.M.,
                                                                                                                                 P82079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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EMBL; U59125; AAB02827.1; -.
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Pred. No. 8.3e
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Pred. No. 8.3e+05;
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Best Local S
Matches 4
                                                                                                                                                                                                      OSUMC7;
01-MAY-2000 (TrEMBLrel. 13, C:
01-MAY-2000 (TrEMBLrel. 13, L
01-MAY-2000 (TrEMBLrel. 13, L
SHMT protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P87225 PRELIMINARY;
P87225;
01-JUL-1997 (TrEMBLrel. 04, C
01-NOV-1999 (TrEMBLrel. 12, L
01-OCT-2002 (TrEMBLrel. 22, L
GIN11 protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; Z73
NON TER
SEQUENCE
                                                                                                                                                                                                  SHMT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomyc
Saccharomycetales; Saccharomycetaceae; Sa
NCBI_TaxID=4932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Raftery M.J., Bradford A.M., Bowie J.H., Wallace J.C., Tyler M.J.; "Peptides from Australian frogs. The structure of the dynastins from banjo frogs Limnodynastes interioras, Limnodynastes dumerilii Limnodynastes terraereginae."; Aust. J. Chem. 46:833-842(1993).

-!- MASS SPECTROMETRY: MW=729; METHOD=FAB.
                                                                                               Homo sapiens (Human)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
Wedler H., Wedler E.,
Submitted (MAY-1996)
                                                   NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                         Q9UMC7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amphibian skin.
SEQUENCE 8 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachi
   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (MAY-1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=TIBIAL GLAND;
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Primates;
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66.7%;
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Last annotation update)
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                                                                                                      Craniata; V
Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Saccharomycotina; Saccharomycetes;
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Mismatches
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O. 8.3e+05;
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Urbach E., Chisholm S.W.;

Genetic diversity in Prochlorococcus populations sorted from the Sargasso Sea and Gulf Stream.";

Limnol. Oceanog. 43:1615-1630(1998).

EMBL; AF070193; AAD23233.1; -.
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"Isolation and characterisation of human genomic cytosolic serine hydroxymethyltransferase.";
Biochem. Soc. Trans. 25:53-53(1997).
EMBL; MI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bacteria; Cyanoba
Prochlorococcus.
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                                                                                                                  MEDLINE=96182101; PubMed=8622700;
Benard M., Lagnel C., Pallotta D., Pierron G.;
Mapping of a replication origin within the promoter region
unlinked, abundantly transcribed actin genes of Physarum
                                                                                                                                                                                                                                                                                                                                                         Physarum polycephalum Eukaryota; Mycetozoa;
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                                                          polycephalum.";
Mol. Cell. Biol. 16:968-976(1996)
                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 21, Last annotation update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
LOW density lipoprotein receptor-related protein (Fragment).
Gallus gallus (Chicken).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Neognathae; Galliformes; Phasianidae; Phasiani:
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01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence up
01-NOV-1996 (TrEMBLrel. 01, Last annotation
Intergenic AT-rich DNA sequence (Fragment).
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Archaea; Euryarchaeota;
Methanococcaceae; Methan
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J. Biol. Chem. 266:19079-19087(1991).
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01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Galactocerebrosidase (EC 3.2.1.46) (Fragment).
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MEDLINE=94320083; PubMed=8044796;

MEDLINE=94320083; PubMed=8044796;

Magalla S.R., Spindel E.R.;

"Functional analysis of the 5'-flanking region of the human gastrin-
releasing peptide gene in small cell lung carcinoma cell lines.";

Cancer Res. 54:4461-4467(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lulli L., Torchiana E., Finocchiaro G.; Submitted (NOV-1996) to the EMBL/GenBank/DDBJ EMBL; U77631; AAD15626.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycosidase; Hydrolase.
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Mammalia; Eutheria;
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"Alternative splicing of the sodium channel SCN8A predicts a two-domain protein in fetal brain and non-neuronal cells.";
J. Biol. Chem. 272:24008-24015(1997).
EMBL; U97672; AAB80914.1; -.
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Oryctolagus cuniculus (Rabbit).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
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Calcyclin-associated protein, CAP50=CA2+/phospholipid-binding protein
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Pred. No.
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Pred. No.
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8.3e+05;
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Copyright (c) 1993 - 2004 Compugen Ltd.
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Title: Perfect score: Sequence: US-09-529-121A-3 45 1 YLSGADINL 9 January 12, 2004, 14:25:20 ; Search time 10.25 Seconds (without alignments) 84.441 Million cell updates/sec

Run on:

Scoring table: BLÓSUM62 Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters:

789

Minimum DB seq length: 0 Maximum DB seq length: 9

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	6	u	4.	ω	N	ь	iòò	
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28.9	28.9	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1		33.3	•	•							35.6	35.6	35.6	% Query Match	
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gene c-rel protein	Ig mu chain V regi		neuropeptide Grb-A	neuropeptide Grb-A	neuropeptide Grb-A	locustamyoinhibiti	T-cell receptor be	phosphatidylethano	2-hydroxyglutaryl-	probable H+-transp	T-cell receptor be	_	_	1 receptor		cell receptor	Ig heavy chain CRD	calliFMRFamide 6 -	cytochrome oxidase		T-cell receptor be	T-cell receptor be	l receptor	hemoglobin alpha c	isotocin - common	leucokinin VIII -		cell receptor	Description	

RESULT 3

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vicilin 72K chain polyphosphate-gluc	RNA-directed DNA p elastase - Pseudom	seminal plasma pro H4 histone - Afric	-glutam	receptor	delta sleep-induci photosystem II pro		carnocin UI49 - Ca

ALIGNMENTS

Qy 2 LSGADI 7 	Query Match 35.6%; Score 16; DB 2; Length 8; Best Local Similarity 33.3%; Pred. No. 2.8e+05; Matches 2; Conservative 3; Mismatches 1; Indels 0; Gaps 0;	A;Molecule type: mRNA A;Residues: 1-8 <par> A;Cross references: GB:K02195; NID:g162150; PID:g162151 C;Keywords: glycoprotein</par>	A;Title: Trypanoser mRNAs share a common 5' spliced leader sequence. A;Reference number: A90853; MUID:84282716; PMID:6088073 A;Accession: A21440	C)ACCEBBLON: M21440 R;Parsons M.; Nelson, R.G.; Watkins, K.P.; Agabian, N. Coll 18 300,316 1984	C;Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 20-Mar-1998	RESULT 2 A21440 variant surface glycoprotein pSLcl - Trypanosoma brucei (fragment)	Db 2 SGGD 5	Qy 3 SGAD 6	Query Match 35.6%; Score 16; DB 2; Length 7; Best Local Similarity 75.0%; Pred. No. 2.8e+05; Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	A;Residues: 1-7 <fee> A;Experimental source: day 18 fetal thymus, strain BALB/c C;Keywords: T-cell receptor</fee>	A;ACCESSION: F10342 A;Status: translation not shown A;Molecule type: mRNA	J. Exp. Med. 174, 115-124, 1991 A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions. A;Reference number: PT0509; MUID:91277601; PMID:1711858	<pre>c;bpecces: mus importance invoice C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997 C;Accession: PT0542 B:Feaner A.T</pre>	PT0542 T-cell receptor beta chain V-D-J region (126-1BA) - mouse (fragment) C.coodies. Mus musculing (house mouse)	RESULT 1
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A; Status: A; Afolecule type: DNA
A; Molecule type: DNA
A; Residues: 1-9 < WHI's
A; Cross references: GB: M23454; NID: g340922; PIDN: AAA52629.1; P
A; Cross references: GB: M23454; NID: g340922; PIDN: AAA52629.1; P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOI. Cell. Biol. 9, 241-251, 1989

A;Title: Transcriptional promiscuity of the human alpha-globin A;Reference number: 157650; MUID:89181576; PMID:2538719
A;Accession: 157650
A; Cross-references: GDB:119293
A; Map position: 16p13.3-16p13.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hemoglobin alpha chain - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 02-Jul-1996 #sequence_revision 31-Jul-1997 #text_change 20-Apr-2000
C;Date: 02-Jul-1996 #sequence_revision 31-Jul-1997 #text_change 20-Apr-2000
C;Date: 02-Jul-1996 #sequence_revision 31-Jul-1997 #text_change 20-Apr-2000
C;Date: 02-Jul-1996 #sequence_revision 31-Jul-1997 #text_change 20-Apr-2000
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C;Date: 02-Jul-1996 #sequence_revision 31-Jul-1997 #text_change 20-Apr-2000
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A; Residues: 1-9 <ACH>
C; Superfamily: oxytocin-neurophysin
C; Keywords: amidated carboxyl end; neuropeptide; posterior pituitary
F; 9/Modified site: amidated carboxyl end (Gly) #status experimental
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A;Residues: 1-8 <hd>
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                                                    A;Gene: GDB:HBA1
A;Cross-referenc
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C;Species: Cyprinus carpio (common carp)
C;Date: 09-Sep-1994 #sequence_revision C
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C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 20-Jun-2000
C;Accession: JS0318
                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Status: translated from GB/EMBL/DDBJ
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A;Status: preliminary
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A;Title: Caracterisation des hormones neurohypophysaires d'un
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R;Acher, R.; Chauvet, J.; Chauvet, M.T.; Crepy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
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Pred. No. 2.8e+05;
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T-cell receptor beta chain V-D-J region (161-2D) - mouse (fragment) (Species: Mus musculus (house mouse) (CJADate: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-JCJACcession: PT0726

R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A;Reference number: PT07509; MUID:91277601; PMID:1711558
A;Accession: PT0726
R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0526
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C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_cha
C;Accession: PT0540
R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta
A;Reference number: PT0509; MUID:91277601; PMID:1711558
                                                                                 C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revisic
C;Accession: PT0526
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A;Molecule type: DNA
A;Residues: 1-6 <FEE>
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PT0726
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A;Status: translation not shown
A;Molecule type: mRNA
A;Residues: 1-5 <FEE>
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Best Local :
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Pred. No. 2.8e+05;
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translation not shown

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A;Genome: mi
A;Note: COI
C;Keywords:
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R;Delarbre, C.; Barriel, V.; Tillier, S.; Janvier, P.; Gachelin, Mol. Biol. Evol. 14, 807-813, 1997
A;Title: The main features of the craniate mitochondrial DNA better A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Accession: T13818
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T. Exp. Med. 174, 115-124, 1991
J. Exp. Junctional sequences of fetal T cell receptor beta chains A; Title: Junctional sequences of fetal T cell receptor beta chains A; Reference number: PT0509; MUID:91277601; PMID:1711558
A; Recession: PT0676
A; Status: translation not shown
A; Molecule type: DNA
A; Residues: 1-7 < FEE>
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A;Residues: 1-7 <FEE>
A;Experimental source: adult thymus, strain BALB/c
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F41978
calliFMRFamide 6 - bluebottle fly (Calliphora vomitoria)
C;Species: Calliphora vomitoria
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C;Genetics:
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A; Residues: 1-8 <DEL>
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C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #C;Accession: PT0676
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o. 2.8e+05;
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2.8e+05;
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R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity for number: PT0222; MUID:91108337; PMID:1899102
A;Accession: PT0288
A;Accession: PT0288
A;Residues: 1-9 < YAM>
A;Experimental source: B lymphocyte
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                      C;Species: Mus musculus (house mouse)
C;Date: (03-Feb-1994 #sequence_revision 03-Feb-1994 #text_char
C;Date: (03-Feb-1994 #sequence_revision 03-Feb-1994 #text_char
C;Accession: G41946
R;Whetsell, M.; Mosley, R.L.; Whetsell, L.; Schaefer, F.V.; Mol. Cell. Biol. 11, 5902-5909, 1991
Mol. Cell. Biol. 11, 5902-5909, 1991
A;Title: Rearrangement and junctional site sequence analyses
A;Reference number: A41946; MUID: 192049316; PMID: 1858619
A;Accession: G41946
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G41946
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Accession: F41978
R;Duve, H.; Johnsen, A.H.; Sewell, J.C.; Scott, A.G.; Orchard, I.; Rehfeld, J.F.; T. Proc. Natl. Acad. Sci. U.S.A. 89, 2326-2330, 1992
A;Title: Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH-2 neuropeptides A;Reference number: A41978; MUID:92196111; PMID:1549595
A;Accession: F41978
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A;Residues: 1-9 <DUV>
C;Keywords: amidated carboxyl end; neuropeptide
F;9/Modified site: amidated carboxyl end (Phe);
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A;Molecule type: DNA
A;Residues: 1-9 <WHE>
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RESULT 14

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T-cell receptor beta chain V-D-J region (120-1L) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Bate: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PT0605
R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0605
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A;Accession: PT0605
A;Accession: PT0605
A;Accession: PT0605
A;Accession: PT0605
A;Experimental source: newborn thymus, strain BALB/c
C;Keywords: T-cell receptor
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T-cell receptor beta chain V-D-J region - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PT0679; PT0708
R;Feeney, A.J
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: TP0679
A;Status: translation not shown
A;Molecule type: DNA
A;Residues: 1-5 <FEE>
A;Residues: 1-5 <FEE>
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A;Nolecule type: DNA
A;Residues: 1-5 <FE2>
A;Experimental source: newborn thymus, strain BALB/c, 161-2B
C;Keywords: T-cell receptor
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Best Local Similarity 75.0%;
Matches 3; Conservative
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   length: 0 length: 9
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DSIP RABIT
FARE PANRE
OXYT RAJCLI
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SEQUENCE. SEQUENCE. SEQUENCE. TISSUE-Head; Holman G.M., Cook B.J., Nachman R.J.; "Isolation, primary structure and synthesis of leucokinins VII "Isolation, primary structure and synthesis of cephalomyotropic peptides isolated from head extracts of Leucophaea maderae."; Comp. Biochem. Physiol. 88C:31-34(1987). -i- FUNCTION: THIS CEPHALOMYOTROPIC PEDTIDE STIMULATES CONTRACT ACTIVITY OF COCKROACH PROTODEUM (HINDGUT). -i- SIMILARITY: TO THE OTHER LEUCOKININS.	RESULT 2 LCK8 LEUMA STANDARD; PRT; 8 AA. AC P1990; DT 01-FEB-1991 (Rel. 17, Created) DT 01-FEB-1991 (Rel. 17, Last sequence update) DT 01-FEB-1991 (Rel. 17, Last annotation update) DT Leucokinin VIII (L-VIII), OS Leucophaea maderae (Madeira cockroach). OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; OC Blaberidae; Leucophaea. OX NCBI_TaxID=6988;	Query Match 37.8%; Score 17; DB 1; Length 8; Best Local Similarity 75.0%; Pred. No. 1.3e+05; Matches 3; Conservative 1; Mismatches 0; Indels 0; Ga Qy 1 YLSG 4	SQUENCE. SQUENCE. SQUENCE. SULINE-85040388; PubMed=6436978; IZUKi A., Mori M., Sagakami Y., Isogai A., Fujino M., raig R.A., Clewell D.B.; raig R.A., Clewell D.B.; raightion and structure of bacterial sex pheromone, contience 226:849-850(1984). 1- FUNCTION: CPD1 IS INVOLVED IN THE CONJUGATIVE TRAN BACTERIOCIN PLASMID PPD1. PROPROSED B. AA; 913 MW; 8665B729C682C729 CRC64;	RESULT 1 CPD1_ENTFA CPD1_ENTFA CPD1_ENTFA CPD1_ENTFA AC	34 10 22.2 5 1 UXA4_CHITR P38005 chlam p35 10 22.2 6 1 CIP2_MYTED P13737 mytil p36 10 22.2 6 1 TMOF_SARBU P41495 sarcoj p37 10 22.2 6 1 UN06_CLOPA P81351 clost. P81801 22.2 7 1 ALL3_CARMA P81805 carcii p39 10 22.2 7 1 ALL3_CARMA P81807 carcii p41 22.2 7 1 ALL3_CARMA P81807 carcii p41 22.2 7 1 ALL7_CYDPO P81808 carcii p42 10 22.2 7 1 ALL7_CYDPO P81808 carcii p43 10 22.2 7 1 ALL7_CYDPO P83379 lycop p44 10 22.2 7 1 VN06_PINPS P81805 cydia p81805 carcii p44 10 22.2 7 1 VN06_PINPS P81805 cydia p81815 carcii p45 10 22.2 8 1 AL12_CARMA P81815 carcii p46 10 22.2 8 1 AL12_CARMA P81815 carcii p81815 carcii
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"Characterization of neurohypophyseal hormones from the carp (Cyprinus carpio). Comparison with water bony fishs.";
Comp. Biochem. Physiol. 14:245-254 (1965).
-i- FUNCTION: ANTIDIURETIC HORMONE.
-i- SIMILARITY: BELONGS TO THE VASOPRESSIN/OXYTOC:
PIR: A61364; A61364.
InterPro; IPR000981; Neurhyp_horm.
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15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Plastidial lipid-associated protein (Fragment).
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Cyprinus carpio (Common carp).
Cyprinus carpio (Common carp).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Cyprinus.
NCBI_TaxID=7962;
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01-NOV-1995
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  STRAIN=CV. TOPAZ;
MEDLINE=99349136;
Hernandez-Pinzon ]
                                                                                                                                           Brassica napus (Rape).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheog
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
eurosids II; Brassicales; Brassicaceae; Brassica.
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Best Local S
Matches 2
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Best Local S
Matches 3
                                                                                                                                                                                                                                       P82156;
P82156;
30-MAY-2000
30-MAY-2000
30-MAY-2000
Cydiastatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=92196111, PubMed=1549595;
Duve H., Johnsen A.H., Sewell J.C., Scott A.G., Orchard I.,
Rehfeld J.F., Thorpe A.;
"Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH2
"Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH2
neuropeptides (designated calliFMRFamides) from the blowfly
Calliphora vomitoria.";
Calliphora vomitoria.";
Proc. Natl. Acad. Sci. U.S.A., 89:2326-2330(192).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FAR6_CALVO STANDARD;
P41861;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last seq
01-NOV-1995 (Rel. 32, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Composition and role of tapetal lipid bodies pollen coat of Brassica napus."; Planta 208:588-598(1999).
Planta 208:588-598(1999).
PINTER OF ANY PLAY A STRUCTURAL ROLE IN THE SPECIFIC PLASTIDIAL LIPID ORGANELLE.
PITISSUE SPECIFICITY: TAPETUM OF ANTHERS.

NON TER

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8
                                                                                                          Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
Tortricoidea; Tortricidae; Olethreutinae; Cydia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Calliphora vomitoria (Blue blowfly).

Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oe

Calliphoridae; Calliphora.
                                                            NCBI_TaxID=82600;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=Thoracic ganglion;
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                                                                                                                                                                                                           Cydia pomonella (Codling moth).
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(Rel. 39, Last seq
(Rel. 39, Last ann
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annotation update)
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annotation update)
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Pred. No.
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96D10699CAB6D865 CRC64;
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Pred.
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E FARP (FMRFAMIDE RE
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1.3e+05;
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Best Local S
Matches 2
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Matches 3
                   PTSP BOMMO STANDARD; PRT; 9 AA.
P82003;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Prothoracicostatic peptide (Bom-PTSP).
Bombyx mori (Silk moth).
Bombyx mori (Silk moth).
Elkaryota; Metazoa; Arthropoda; Hexapoda; Insect
Neoptera; Endopterygota; Lepidoptera; Glossata;
Bombycidae; Bombyx.
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01-JUL-1993 (Rel. 26, Last sequence update)
01-JUL-1993 (Rel. 27, Last annotation update)
10-CCT-1993 (Rel. 27, Last annotation update)
Locustamyoinhibiting peptide (LOM-MIP).
Locusta migratoria (Migratory locust).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta;
Neoptera; Orthopteroidea; Orthoptera; Caelifera; Ac
                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=92179466; PubMed=1796179; Schoofs L., Holman G.M., Hayes T.K., Nachman R.J., de Loof A.; "Isolation, identification and synthesis of locustamyoinhibiting peptide (LOM-MIP), a novel biologically active neuropeptide from Locusta migratoria."; Regul. Pept. 36:111-119(1991).
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Duve H., Johnsen A.H., Maestro J.-L., Scott
Davey M., East P.D., Thorpe A.;
"Lepidopteran peptides of the allatostatin s
Peptides 18:1301-1309(1997).
-!- SIMILARITY: BELONGS TO THE ALLATOSTATIN
                                                                                                                                               BOMMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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        NCBI_TaxID=7091
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3; Conserv
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                                                                                                                                                                                                                                                                                             9 AA;
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1060 MW;
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Pred. No.
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Pred. No.
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                                  Hexapoda; Insecta; Pterygota;
ptera; Glossata; Ditrysia; Bombycoidea;
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STRAIN=C145 X N140; TISSUE=Brain;
MEDLINE=20002634; PubMed=10531308;
Hua Y.-J., Tanaka Y., Nakamura K.,
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MEDLINE=92321768; PubMed=1622206;
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01-JUN-1994 (Rel. 29, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Lantibiotic carnocin UI49 (Fragment)
Carnobacterium sp. (strain UI49)
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J. Biol. Chem. 274:31169-31173(1999).
                                                                                                                                                                                               Antibiotic; Bacteriocin; Lantibiotic.
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                                                                                                                                                                                                                   Carnobacterium sp.",
ppl. Environ. Microbiol. 58:1417-1422(1992).
PUNCTION: LANTHIONINE-CONTAINING PEPTIDE
ACTIVE ON GRAM-POSITIVE BACTERIA.
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21-JUL-1986 (Rel. 01, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Delta sleep-inducing peptide (DSIP).
Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
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     PIR;
                                               "Delta-sleep-inducing peptide (DSIP): an update.";

Peptides 7:1165-1187(1986).

-;- FUNCTION: WHEN INFUSED INTO THE MESODIENCEPHALIC VENTRICLE:
-;- FUNCTION: WHEN INFUSED INTO THE MESODIENCEPHALIC VENTRICLE:
-;- MEDUCED MOTOR ACTIVITIES.
-;- MISCELLANEOUS: THIS PEPTIDE WAS OBTAINED FROM DIALYSATES OF OCCIPITAL VENOUS SINUS BLOOD FROM RABBITS KEPT ASLEEP BY EL.
-;- DATABASE: NAME=Protein Spotlight;
NOTE=Issue 8 of March 2001;
                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=79054421; PubMed=568769; Schoenenberger G.A., Maier P.F., Tobler H.J., Wilson K., Monnier "The delta EEG (sleep)-inducing peptide (DSIP). XI. Amino-acid analysis, sequence, synthesis and activity of the nonapeptide."; Pflugers Arch. 376:119-129(1978).
                                                                                                                                                                                                                                                                                                                       MEDLINE=87175129; PubMed=3550726; Graf M.V., Kastin A.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schoenenberger G.A.; "The delta sleep inducing peptide (DSIP). the original and synthetic nonapeptide.";
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Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Bucarida; Decapoda; Pleocyemata; Caridea;
Palaemonoidea; Palaemonidae; Macrobrachium.
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Monnier M., Dudler L., Gachter R.,
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Comp. Biochem. Physiol. 120B:887-58(1998).
-i- MASS SPECTROMETRY: MW=1009.4; METHOD=MALDI.
-i- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELATED
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Matches 2
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                                                                                                                                                                                                          OXYT_RAJCL
P42994;
01-NOV-1995
01-NOV-1995
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FAR2 PANRE
P41873;
01-NOV-1995
MEDLINE=66123415; PubMed=5880565; Acher R., Chauvet J., Chauvet M.-T., Crepy D.; Acher R., Chauvet J., Chauvet M.-T., Crepy D.; Pylogeny of neurophyophyseal peptides: isolation of a new glumitocin (Ser 4-Gln 8-ocytocin) present in a cartilaginou the ray (Raia clavata)."; Biochim. Biophys. Acta 107:393-396(1965).
-!- FUNCTION: ANTIDIURETIC HORMONE.
-!- SIMILARITY: BELONGS TO THE VASOPRESSIN/OXYTOCIN FAMILY. InterPro; IPR000981; Neurhyp_horm.
                                                                                                                                  Raja clavata (Thornback ray).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchii; Squalea; Hypnosqualea; Pristiorajea; Batoidea;
Rajiformes; Rajidae; Raja.
NCBI_TaxID=7781;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P41873;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
01-NOV-1995 (Rel. 32, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                               Neuropeptide;
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Geary T.G., Price D.A., Bowman J.W., Winterrowd C.A., Mackenzie Garrison R.D., Williams J.F., Friedman A.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PANRE
                                                                                                                                                                                               Glumitocin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Panagrellus redivivus.";
Peptides 13:209-214(1992).
                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- TISSUE SPECIFICITY: NERVE CORDS AND PAIRED CAUDALLY TO THE BASE OF THE PHARYNX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Two FMRFamide-like peptides from the free-living nematods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=93027659; PubMed=1408999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=6233;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Panagrolaimoidea; Panagrolaimidae; Panagrellus.
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3; Conserv
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(Rel. 32, Last sequence update)
(Rel. 32, Last annotation update)
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50.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                    AMIDATION.
DA0B0729C4576AAD
                                                                                                                                                                                                                                                                                                                                                                                 Score 13;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 13;
Pred. No.
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Pfam; PF00220; hormone4; 1

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AC P30369;
AC P30369;
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DT 01-APR-1993 (
DT 15-SEP-2003 (
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01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Actin (Fragment).
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NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                      InterPro; IPR004001; Actin.
InterPro; IPR004000; Actin_like.
PROSITE; PS00406; ACTINS_1; PARTIAL.
PROSITE; PS00432; ACTINS_2; PARTIAL.
PROSITE; PS00432; ACTINS_ACT_LIKE; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                "A transaldolase. An enzyme implicated in crab steroidogenesis.";
Endocrine 5:23-32(1996).
-i- FUNCTION: ACTING ARE HIGHLY CONSERVED PROTEINS THAT ARE INVOLVED
IN VARIOUS TYPES OF CELL MOTILITY AND ARE UBIQUITOUSLY EXPRESSED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carcinus maenas (Common shore crab) (Green crab).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura;
Eubrachyura; Portunoidea; Portunidae; Carcinus.
Macropus eugenii (Tammar wallaby), and
Dasyurus viverrinus (Southeastern quoll).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                 IN ALL EURARYOTIC CELLS.

-i- SUBCELLULAR LOCATION: Cytoplasmic.

-i- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED

6.8, ITS MW IS: 46 kDa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE.
Lachaise F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eubrachyura; Por
NCBI_TaxID=6759;
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                                                                                                                                                                                                                                                                                                  Structural
                                                                                                                                                                                                                                                                                                                                                                      -!- SIMILARITY: Belongs to the actin family.
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                                                Cholecystokinin
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3 (Rel. 25, Last sequ
3 (Rel. 42, Last anno
kinin (CCK).
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976 MW;
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66.7%;
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25.0%;
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17E9C76EB455B04B CRC64;
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                                                          sequence update) annotation update
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Pred. No.
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Mismatches 0;
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-I- FUNCTION: THIS PEPTIDE HORMONE INDUCES GALL BLADDER CONTRACTION
-I- FUNCTION THE RELEASE OF PAUCREATIC ENZYMES IN THE GUT. ITS FUNCTION
IN THE BRAIN IS NOT CLEAR.
-I- SIMILARITY: BELONGS TO THE GASTRIN/CHOLECYSTOKININ FAMILY.
                                                                                                                                                                                                                                                                                                                                                MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR001651; Gastrin.
PROSITE; PS00259; GASTRIN; 1.
Amidation; Sulfation; Hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPECIES=M.eugenii,
TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia; Metatheria; Diprotodontia; Macropodidae; Macropus.
NCBI_TaxID=9315, 9279;
                                                                                                                                                                                                                                                                                                           SEQUENCE
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PIR; PQ0012; PQ0012.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=88234141; PubMed=3375140;
Fan Z.W., Eng J., Shaw G., Yalow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          an Z.W., Eng J., Shaw G., Yalow R.S.; Cholecystokinin octapeptide purified from brains of Australian
N
                                                                    1 YLSGAD 6
                                                                                                                                                 Similarity 2; Conserv
YMGWMD
                                                                                                                                                                                                                                                                                                           8 AA;
                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                           8
1064 MW;
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                                                                                                                                                                                      26.7%;
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Pred. No. 1.3e+05;
1; Mismatches 3
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Result
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Perfect score:
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Maximum
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 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1: pir1:*
2: pir2:*
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ALIGNMENTS

RESULT E60588

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RESULT 2
H41978
callipMRPamide 8 - bluebottle fly (Calliphora vomitoria)
C;Species: Calliphora vomitoria
C;Species: Calliphora vomitoria
C;Species: Calliphora vomitoria
C;Species: Calliphora vomitoria
C;Species: Osep-1993 #sequence_revision 30-Sep-1993 #text_change 17-Mar-1999
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 17-Mar-1999
C;Accession: H41978
R;Duve, H.; Johnsen, A.H.; Sewell, J.C.; Scott, A.G.; Orchard, I.; Rehfeld,
Proc. Natl. Acad. Sci. U.S.A. 89, 2326-2330, 1992
A;Title: Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH-2 neuropo
A;Reference number: A41978; MUID:92196111; PMID:1549595
A;Accession: H41978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Yoshino, K.I.; Kajiura, H.; Nomura, K.; Takao, T.; Shimonishi, Y.; Kurita, M.; Yamagucl Comp. Biochem. Physiol. B 94, 739-751, 1989
A;Title: A halogenated amino acid-containing sperm activating peptide and its related perotus nudus, Echinometra mathaei and Heterocentrotus mammillatus.
A;Reference number: A60527
A;Accession: E60588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sperm-activating peptide a - sea urchin (Pseudoboletia maculata)

N;Alternate names: speract homolog

C;Species: Pseudoboletia maculata

C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 18-Aug-2000

C;Accession: E60588
                                                                                                                                                                               A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-8 <DUV>
C;Keywords: amidated carboxyl end; neuropeptide
F;8/Modified site: amidated carboxyl end (Phe) f
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Pred. No. 2.8e+05;
0; Mismatches 0;
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2.8e+05;
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R;Delarbre, C.; Barriel, V.; Tillier, S.; Janvier, P.; Gachelin, G. Mol. Biol. Evol. 14, 807-813, 1997
A;Title: The main features of the craniate mitochondrial DNA between the ND1 A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Accession: T13818
                                 A; Residues: 1-9 < YAM>
A; Experimental source: B lym
C; Keywords: heterotetramer;
                                                                                                 R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G. J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and A;Reference number: PT0222; MUID:91108337; PMID:1899102
A;Accession: PT0288
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein
A; Residues: 1-9 <ACH>
A; Residues: 1-9 <ACH>
C; Superfamily: oxytocin-neurophysin
C; Keywords: amidated carboxyl end; neuropeptide; posterior pituitary
F; 9/Modified site: amidated carboxyl end (Gly) #status experimental
                                                                                                                                                                                                                      C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision
C;Accession: PT0288
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R;Acher, R.; Chauvet, J.; Chauvet, M.T.; Crepy, D.
Comp. Biochem. Physiol. A 14, 245-254, 1965
A;Title: Caracterisation des hormones neurohypophysaires d'un poisson osseux d'eau douce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         isotocin - common carp
C;Species: Cyprinus carpio (common carp)
C;Date: 09-Sep-1994 #sequence_revision C
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C; Keywords:
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A;Accession: A61364
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A; Residues: 1-8 < DEL>
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                                                                                                                                                                                                                                                                                 Ig heavy chain CRD3 region (clone 4-106) - human (fragment)
                                                           Experimental source: B lymphocyte
                                                                              Residues: 1-9 < YAM>
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RESULT 7
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                                                  R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seminal plasma protein II - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 17-Mar-1999
C;Accession: S62883
R;Romero, A.; Varela, P.F.; Sanz, L.; Toepfer-Petersen, E.; Calvete, J.J.
FEBS Lett. 382, 15-17, 1996
                                                                                                                                                T-cell receptor beta chain V-D-J region (120-1L) - C;Species: Mus musculus (house mouse) C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 C;Accession: PT0605
                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: protein
A; Residues: 1-5 < ROM>
C; Complex: heterodimer; seminal plasma
C; Keywords: glycoprotein; heterodimer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Title: Crystallization and preliminary X-ray diffraction analysis of boar seminal A;Reference number: S62882; MUID:96196555; PMID:8612739 A;Accession: S62883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-9 <WHE>
C; Keywords: T-cell receptor
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A;Accession: G41946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T-cell receptor gamma chain (2t.23) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 07-May-1999
C;Accession: G41946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R; Whetsell, M.; Mosley, R.L.; Whetsell, L.; Mol. Cell. Biol. 11, 5902-5909, 1991
A;Molecule type: mRNA
A;Residues: 1-6 <FEE>
                                      A;Status: translation not shown
                                                                                                                                                                                                                                PT0605
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Pred. No. 2
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2.8e+05;
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source: newborn thymus,

strain BALB/c

C; Keywords:

T-cell

Query Match Best Local S Matches 3

Similarity
3; Conserv

31.1%; Score 14; ilarity 100.0%; Pred. No. Conservative 0; Mismatci

Mismatches

DB 2; Le

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T-cell receptor beta chain V-D-J region (121-1BK) - mouse (f (5Epecies: Mus musculus (house mouse) C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_cha C;Accession: PT0654 R;Feeney, A.J. J. Exp. Med. 174, 115-124, 1991 J. Exp. Med. 174, 115-124, 1991 A;Title: Junctional sequences of fetal T cell receptor beta A;Reference number: PT0509; MUID:91277601; PMID:1711558 A;Accession: PT0654 A;Status: translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Mawal, Y.R.; Mawal, M.R.; Ranjekar, P.K.
Biochem. Biophys. Res. Commun. 166, 1446-1452, 1990
A;Title: Unusual denaturation properties of vicilin from
A;Reference number: A34818; MUID:90165956; PMID:2306256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            vicilin 72K chain - pigeon pea (fragment)
C;Species: Cajanus cajan (pigeon pea)
C;Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 30-Sep-1993
C;Accession: A34818
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PT0593
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A; Residues: 1-6 <FEE>
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J. Exp. Med. 174, 115-124, 1991

A;Title: Junctional sequences of fetal T cell receptor beta chains A;Reference number: PT0509; MUID:91277601; PMID:1711558
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Pred. No.
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Pred. No. 2.8e+05;
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phosphatidylethanol amine-binding protein - C;Species: Mus musculus (house mouse) C;Date: 29-Oct-1997 #sequence_revision 29-Oc C;Accession: PN0043 R;Kato, H.
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S58797
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A21440
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                                                                              RESULT
PN0043
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                                                                                                                                                                                                                                                                                                                                                                                                          variant surface glycoprotein pSLc1 - Trypanosoma brucei (fragment) C;Species: Trypanosoma brucei (C;Species: Trypanosoma brucei C;Date: 19-Nov-1988 #sequence revision 19-Nov-1988 #text_change 20-Mar-1998 C;Accession: A21440
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C;Keywords:
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A;Title: Expression of c-mos protein in cultured rat spermatogenic cells and evidence that
A;Reference number: S58797; MUID:95383384; PMID:7654761
A;Accession: S58797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Rattus norvegicus (Norway rat)
C;Date: 15-Peb-1996 #sequence revision 01
C;Accession: S58797
R;Nagao, Y
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A; Residues: 1-8 < PAR>
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A; Residues: 1-7 < NAG>
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A; Residues: 1-7 < FEE>
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                             #sequence_revision 29-Oct-1997
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Pred. No. 2.8e+05
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Pred. No. 2.
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,. 2.8e+05;
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neuropeptide Grb-AST B3 - two-spotted cricket
C;Species: Gryllus bimaculatus (two-spotted cricket)
C;Date: 26-Jan-1996 #sequence_revision 26-Jan-1996 #text_change 26-Jan-1996
C;Accession: C57444
R;Lorenz, M.W.; Kellner, R.; Hoffmann, K.H.
J. Biol. Chem. 270, 21103-21108, 1995
A;Ttle: A family of neuropeptides that inhibit juvenile hormone biosynthesis in the cri
A;Reference number: A57444; MUID:95403341; PMID:7673141
A;Accession: C57444
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-9 <LOR>
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A;Title: Analysis of proteins isolated by two dimensional electrophoresis of mouse neuro A;Reference number: PN0041
A;Recession: PN0043
A;Molecule type: protein
A;Residues: 1-8 <KAT>
A;Residues: 1-8 <KAT>
A;Experimental source: neuroblastoma cell
C;Comment: The molecular mass is 23,500 and the pI is 4.8. The amino-terminus is blocked C;Keywords: brain
Search completed: January 12, 2004, 14:31:53 Job time: 11.25 secs
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Proc. Natl. Acad. Sci. U.S.A. 89:2326-2330(1992). 	"Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH2 neuropeptides (designated calliFWRFamides) from the blowfly	MEDLINE=92196111; PubMed=1549595; Duve H., Johnsen A.H., Sewell J.C., Scott A.G., Orchard I., Rehfold J.F., Thorne A.:	II) SEQUENCE. TICOTE-Thorsein Ganglion.	NCBI_TaxID=27454;	Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Destroidea; Callinhoridae: Callinhora	y). exapoda; Insecta; Pterygo	mide 8.		1995 (Rel. 32, Creat	Criminal Comments			5 FLSG 8	1 YLSG 4	Query Match 37.8%; Score 17; DB 1; Length 8; Best Local Similarity 75.0%; Pred. No. 1.3e+05; Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;	SEQUENCE 8 AA; 913 MW; 8665B729C682C729 CRC64;	DAKIBATUKIN EMAMIN FEDI.	-!- FUNCTION: CPD1 IS INVOLVED IN THE CONJUGATIVE TRANSFER OF THE	Science 226:849-850(1984).	, Clewell D.B.;	Suzuki A., Mori M., Sagakami Y., Isogai A., Fujino M., Kitada C.,	ibMed=6436978;	SECTION CE		Lactobacillales	Sex preromone CPUI. Enterococcus faecalis (Streptococcus faecalis).		(Rel. 13, Last

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Glumitocin.
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Acher R., Chauvet J., Chauvet M.-T., Crepy D.;

Acher R., Chauvet J., Chauvet M.-T., Crepy D.;

"Characterization of neurohypophyseal hormones from a fresh water
fish, the carp (Cyprinus carpio). Comparison with hormones from water bony fishs.";

Comp. Biochem. Physiol. 14:245-254 (1965).

-!- FUNCTION: ANTIDIURETIC HORMONE.

-!- FUNCTION: BELONGS TO THE VASOPRESSIN/OXYTOCIN FAMILY.

PIR; A61364; A61364.

PIR; A61364: Neurhyp horm.
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MEDLINE=66123415; PubMed=5880565; Acher R., Chauvet J., Chauvet M.-T.,
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Rajiformes; Rajidae; Raja.
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72D40699CAA44DD8 CRC64;
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P06294;
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Pleau J.-M., Dardenne M., Blouquit Y., Bach J.-F.;
Pleau J.-M., Dardenne M., Blouquit Y., Bach J.-F.;
"Structural study of circulating thymic factor: a peptide iso
from pig serum. II. Amino acid sequence.";
J. Biol. Chem. 252:8045-8047(1977).
-I- MISCELLANEOUS: THE BIOLOGICAL SOURCE(S) AND PHYSIOLOGICAL
ACTIVITIES OF THIS PEPTIDE HAVE NOT BEEN DETERMINED.
PIR; A01523; YFPG.
SEQUENCE.
Avigad G.,
                              Galactose oxidase inhibitor.

Dactylium dendroides (Cladobotryum dendroides).

Eukaryota, Fungi, Ascomycota; Pezizomycotina; S

Hypocreomycetidae; Hypocreales; Hypocreaceae; N

NCBI_TaxID=5132;
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Biophim. Biophys. Acta 107:393-396(1965).
BIOCHIM. BIOTHER TIC HORMONE.
-!- FUNCTION: ANTIDURETIC HORMONE.
-!- SIMILARITY: BELONGS TO THE VASOPRESSIN/OXYTOCIN FAMILY.
                                                                                 01-JAN-1988 (Rel. 06, Created)
01-JAN-1988 (Rel. 06, Last seq
01-CCT-1994 (Rel. 30, Last ann
Galactose oxidase inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sus scrofa (Pig).
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last seq
28-FEB-2003 (Rel. 41, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Phylogeny of neurophyophyseal peptides: isolation of a new hormone, glumitocin (Ser 4-Gln 8-ocytocin) present in a cartilaginous fish,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9823;
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66.7%;
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17E9C76EB455B04B CRC64;
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PB1179;
PB1179;
PB117998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1998 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Endo-polygalacturonase (PG) (EC 3.2.1.15) (Fragment).
Diaprepes abbreviatus (Sugarcane rootstalk borer weevil).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Coleoptera; Polyphaga; Cucujiformia;
Neoptera; Endopterygota; Entiminae; Entimini; Diaprepes.
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Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Serratia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Bacteriocin serracin P 43 kDa subunit (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Copper; Metalloenzyme inhibitor. SEQUENCE 7 AA; 706 MW; 75BB(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Identification of a peptide inhibitor of galactose oxidase Dactylium dendroides.";
Fed. Proc. 31:447-447(1972).
-i- FUNCTION: BINDS ONE COPPER ION PER MOLECULE BUT DOES NOT GALACTOSE OXIDASE APOENZYME. IT MAY INACTIVATE THE ENZYM BINDING TO ITS PROSTHETIC COPPER GROUP.
PIR; A01341, XEYDGD.
                                                                                                                                                                                                                                                                                                                                                                                       DIAAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jabrane A., Sabri A., Compe Van Beeumen J., Thomart P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=82996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Characterization of serracin P, a phage-tail-like bacteriocin, its activity against Erwinia amylovora, the fire blight pathogen Appl Environ Microbiol 68:5704-5710(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=22293561; PubMed=12406768;
                                              NCBI_TaxID=13040;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antibiotic; Bacteriocin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR006498; Tail_tube.
Pfam; PF04985; Phage_tube; 1.
   SEQUENCE.
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28.6%;
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Pred. No.
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      RESULT 9
FAR3_HIRME
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01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
PMRFamide-like neuropeptide YLRF-amide.
Hirudo medicinalis (Medicinal leech).
Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida;
Arynchobdellida; Hirudiniformes; Hirudinidae; Hirudo.
NCBI TaxID=6421;
                                                                                                                                               -PRCT PERAM
P01373;
21-JUL-1986
21-JUL-1986
01-FEB-1995
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"purification and characterization of an endo-polygalacturonase from the gut of West Indies sugarcane rootstalk borer weevil (Diaprepes abbreviatus L.) larvae.";

Comp. Biochem. Physiol. 118B:861-867(1997).

-1- CAPALYTIC ACTIVITY: Random hydrolysis of 1,4-alpha-D-galactosiduronic linkages in pectate and other galacturonans.

-1- INDUCTION: INHIBITED BY CITRUS PGIP.

-1- MISCELLANBOUS: ON THE 2D-GEL THE DETERMINED PI OF THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Evans B.D., Pohl J., Kartsonis M.A., Cala
"Identification of RFamide neuropeptides
Peptides 12:897-908(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hydrolase; Glycosidase; Cell wall.
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Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattidae; Periplaneta.
NCBI_TaxID=6978, 6850, 6759;
                                                      Limulus polyphemus (Atlantic horseshoe crab), and Carcinus maenas (Common shore crab) (Green crab).

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Neuropeptide; Amidation.
MOD_RES 4 4
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Evans B.D., Pohl J., Kartsonis M.A.,
                                                                                                                Periplaneta americana (American cockroach),
                                                                                                                               Proctolin
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SIMILARITY: WEAK, TO OTHER POLYGALACTURONASES
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(Rel. 01, Last sequence update)
(Rel. 31, Last annotation updat
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69D4073B30000000
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Pred. No.
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01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
01-FEB-1996 (Rel. 33, Last annotation updat
FMRFamide-like neuropeptide AF2.
                                        SPECTES=A. suum;
MEDLINE=93324431; PubMed=8332542;
Cowden C., Stretton A.O.W.;
"AF2, an Ascaris neuropeptide: isolation,
Peptides 14:423-430(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                    ASCSU
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MEDLINE=86232789, PubMed=2872661;
MEDLINE=86232789, PubMed=2872661;
MEDLINE=86232789, PubMed=2872661;
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MEDLINE=90287800; PubMed=2356151;
Groome J.R., Tillinghast E.K., Townley M.A., Vetrovs A.,
Watson W.H. III, Hunt D.F., Griffin P.R., Alexander J.E.,
Shabanowitz J.;
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MEDLINE=76074708; PubMed=576;
Starratt A.N., Brown B.E.;
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    SEQUENCE.
                                                                                                                                                                                                                 Eukaryota; Metazoa; Nematoda;
Ascarididae; Ascaris.
                                                                                                                                                                                                                                                             Panagrellus redivivus.
                                                                                                                                                                                                                                                                                 Ascaris suum (Pig roundworm)
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SEQUENCE 5
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Peptides 11:205-211(1990).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O'Shea M.,
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MEDLINE=81225865; PubMed=6113690;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                               01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Lantibiotic carnocin UI49 (Fragment).
                                                                              LANC CAL
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Submitted (AUG-1998) to the SWISS-PROT data
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
16-DCCT-2001 (Rel. 40, Last annotation update)
GTP cyclohydrolase I feedback regulatory protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=95060998; PubMed=7970891;
Maule A.G., Shaw C., Bowman J.W.;
Maule FMRFamide-like neuropeptide AF2 (Ascaris suu free-living nematode, Panagrellus redivivus (Nema Parasitology 109:351-356(1994).

--- FUNCTION: HAS EFFECTS ON MUSCLE TENSION.
--- TISSUS SPECIFICITY: FOUND IN THE NERVE CORDS GANGLIA PARTICULARLY IN THE ANTERIOR REGIONS.
--- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RE
         Carnobacterium sp. (strain UI49).
Bacteria; Firmicutes; Lactobacillales;
                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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1.3e+05;
           Carnobacteriaceae;
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01-JAN-1990 (Rel. 13, Last sequence update)
01-FEB-1991 (Rel. 17, Last annotation update)
                                                                                                                                                                                                   LCK8 LEUMA STANDARD; PRT; 8 AA. P19930; O1-FEB-1991 (Rel. 17, Created) O1-FEB-1991 (Rel. 17, Last sequence update) O1-FEB-1991 (Rel. 17, Last annotation update) Leucokinin VIII (L-VIII).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIINE=85051889; PubMed=6437872;
Mori M., Sagakami Y., Narita M., Isogai A., Fujino M., Kitada Craig R.A., Clewell D.B., Suzuki A.;
"Isolation and structure of the bacterial sex pheromone, cAD1, induces plasmid transfer in Streptococcus faecalis.";
FEBS Lett. 178:97-100(1984).
-i- FUNCTION: CAD1 IS INVOLVED IN THE CONJUGATIVE TRANSFER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     App1.
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                                                                                                 Leucophaea maderae (Madeira cockroach).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
Blaberidae; Leucophaea.
                                                                                                                                                                                                                                                                                                                                                                   LEUMA
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Bacteria; Firmicutes; Lactobacillales; Enterococcaceae; Enterococcus.
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FUNCTION: LANTHIONINE-CONTAINING PEPTIDE ANTIBIOTIC (LANTIBIOTIC)
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                                                                                                                                                  "Isolation, primary structure and synthesis of leucokinins VII and VIII: the final members of this new family of caphalomyotropic peptides isolated from head extracts of Leucophaea maderae."; Comp. Biochem. Physiol. 88C:31-34(1997).

-i-FUNCTION: THIS CEPHALOMYOTROPIC PEPTIDE STIMULATES CONTRACTILE ACTIVITY OF COCKROACH PROTODEUM (HINDGUT).

-i-SIMILARITY: TO THE OTHER LEUCOKININS.

PIR; JS0318, JS0318.
                                                                                                               SEQUENCE
                                                                                                                          Neuropeptide; Amidation.
MOD_RES 8 8
                                                                                                                                                                                                                                                                    Holman G.M.,
                          4 GAN 6
                                                     Similarity 2; Conserv
                                                                                                             8 8
8 AA; 902 MW;
                                                      Conservative
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                                                                     24.4%;
                                                                                                               AMIDATION.
736365AB59CAADD8
                                                                     Score 11; DB 1;
Pred. No. 1.3e+05;
                                                        Mismatches
                                                                                                                CRC64;
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Search completed: January 12, 2004, 14:29:03 Job time: 7.25 secs

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Q9r7e8 escherichia
Q8rk6 erwinia chr
Q9tr80 orytchlagus
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Q8utd7 human immun
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ALIGNMENTS

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ID P87225
AC P872
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CC Euka
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P87225;
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01-JUL-1997 (TrEMBLrel. 04, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
GIN11 protein (Fragment).
Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
P82079 PRELIMINARY;
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01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
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Wedler H., Wedler E., Scharfe M., Wambutt R.;
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01-OCT-2002
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Raftery M.J., Bradford A.M., Bowie J.H., We "Peptides from Australian frogs. The structhe banjo frogs Limmodynastes interioras, Limmodynastes terraereginae.";
Aust. J. Chem. 46:833-842(1993).

-I- MASS SPECTROMETRY: MW=729; METHOD=FAB.
      Prochlorococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                    bacteria and their classification.";
Res. Microbiol. 152:811-822(2001).
EMBL; AJ302776; CAC82975.1; -.
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Minakhin L.S., Kalyaeva E.S., Kopteva
Yurieva O.V., Nikiforov V.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
Limnodynastinae; Limnodynastes.
                                              Cytochrome b
                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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Enterobacteriaceae; Klebsiella.
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TISSUE=TIBIAL GLAND;
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DYNASTIN 1.
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Pred. No.
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Pred. No.
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                                                                                                                                                    PRT;
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Petrova M.A.,
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                                          O9P869 PRELIMIANA...,

Q9P869;

O1-MAY-2000 (TrEMBLrel. 13, Created)

O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)

O1-JUN-2002 (TrEMBLrel. 21, Last annotation update)

LOW density lipoprotein receptor-related protein (Fragment).

Gallus gallus (Chicken).

Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Eukaryota, Metazoa; Neognathae; Galliformes; Phasianidae; Phasiani
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CD95 antigen
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Prochlorococcus.
NCBI_TaxID=1220;
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Bukaryota; Metazoa; Chordata;
Mammalia; Butheria; Primates;
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Urbach B., Chisholm S.W.;

"Genetic diversity in Prochlorococcus populations sorted from the Sargasso Sea and Gulf Stream.";

Limnol. Oceanog. 43:1615-1630(1998).

EMBL; AF070193; AAD23233.1; -.
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Eur. J. Immunol. 32:3785-3792(2002).
EMBL: AJ500178. CARAGOOG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
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Q1-NOV-1996 (TrEMBLrel. 01, Created)
Q1-JNO-1999 (TrEMBLrel. 09, Last sequence update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
MHC class I antigen (Fragment).
Gallus gallus (Chicken).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel.
Thomanuria; Aves; Neognathae; Galliformes; Phasianidae;
                                                                        EMBL; D90
NON TER
SEQUENCE
                                                                                                                                           Kanki T., Kuwasawa N., Sekiya Y., Ichika "Responsive expression of a MHC class I Marek's disease virus infection."; Submitted (JAN-1992) to the EMBL/GenBank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON_TER
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Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ438189; CAD27339.1; -.
NON TER 9
SEQÜENCE 9 AA; 999 MW; 9A8BC455B9D5B045 CRC64;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus
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Tokumitsu H., Mizutani A., Minami
                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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newly identified member
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8.3e+05;
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Halterman D.A., Wei F., Wise R.P. "Powdery mildew-induced Mla mRNA, contain multiple upstream open ruplant Physiol. 0:0-0(2003).

EMBL; AY009939; AAG37357.1; --
EMBL; AY009938; AAG37355.1; --
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STRAINCOV. Algerian;
Zhou F., Kurth J., Wei F., Elliott C., Vale G., Yahiaoui
Keller B., Somerville S., Wise R., Schulze-lefert P.;
"Cell-autonomous Expression of Barley Mial Confers Race-
"Cell-autonomous Expression of Barley Mial Confers Race-
"Resistance to the Powdery Mildew Fungus via a Rarl Indep
                                                                                                                                                                                                                                                                          Resistance to the Powdery Signaling Pathway."; Plant Cell 0:0-0(2001).
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Spermatophyta; Magnollophyta; Lillopsida; Poales; Poaceae; Pooideae;
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Coniferopsida; Coniferales; Pinaceae;
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Hypothetical 1.1 kDa protein.
Murine minute virus (Murine parvovirus).
Viruses; ssDNA viruses; Parvoviridae; Par
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STRALN=MVM(P);
MEDLINE=83143341; PubMed=6298737;
Astell C.R., Thomson M., Merchlinsky
"The complete DNA sequence of minute
                                                                                                                                                                    STRAIN-LYMPHOTROPIC VARIANT;

MEDLINE-86115415; PubMed-3502703;

Astell C.R., Gardiner E.M., Tattersall P.;

"DNA sequence of the lymphotropic variant c
"DNA sequence of the lymphotropic variant c
"MVM(1), and comparison with the DNA sequenc
prototype strain.";

J. Virol. 570:656-669(1986).
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"Alternative splicing of the sodium channel SCNBA predicts of two-domain protein in fetal brain and non-neuronal cells.";
J. Biol. Chem. 272:24008-24015(1997).
EMBL; U97672; AABB0914.1; -.
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annotation update)
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        M., Ward
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STRAIN=00BW1471.27;

Novitsky V.A., Smith U.R., Gilbert P., McLane M.F., Chigwedere P., Williamson C., Ndung'u T., Klein I., Chang S.-Y., Peter T., Thior I., Foley B.T., Galekwe S., Rybak N., Gaseitsiwe S., Vannberg F., "HIV-1 subtype C molecular phylogeny: consensus sequence for an AIDS vaccine design.",

Submitted (CCT-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AF443091; AAL34712.1; -.

SEMBL; AF443091; AAL34712.1; -.

SEMBL; AF443091; AAL34712.1; -.

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Nucleic Acids Res. ;
[3]
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QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; QUIDT; Q
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Morgan W.R., Ward D.C.;
Worder Splicing patterns are used to excise the small intron common to all minute virus of mice RNAs.";
J. Virol. 60:1170-1174(1986).
EMBL; M12032; AAA67512.1; -.
EMBL; J02175; AAA67112.1; -.
EMBL; V01115; CAA24311.1; -.
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MEDLINE=86115415; PubMed=3502703;

Astell C.R., Gardiner E.M., Tattersall P.;

"DNA sequence of the lymphotropic variant of minute virus of mice,

MVM(1), and comparison with the DNA sequence of the fibrotropic
                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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RESULT 3 F22565

R-phycoerythrin gamma-A chain - red alga (Gastroclonium coulteri) (fragment)

Similarity 75.0%; Pred. No. 2.8e+05; 3; Conservative 0; Mismatches 1; Inde SGAC 6	receptor beta chain V-D-J region (121-1E) - mouse (fragment) ries: Mus musculus (house mouse) ries: Nus musculus (house mouse) ries: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997 rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. rey, A.J. region: PT0652 resion: PT0509; MUID:91277601; PMID:1711558 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: PT0652 resion: Translation not shown recule type: mRNA resion: Translation not shown recule type: mRNA resion: PT0652	Query Match 35.4%; Score 17; DB 2; Length 6; Best Local Similarity 100.0%; Pred. No. 2.8e+05; Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps Qy 5 ACL 7 Db 3 ACL 5	red alga (Gastroclonium couleri eri revision 07-Mar-1988 #text_ch 1985 he bilin attachment sites in ID:85182601; PMID:3886644	30 12 25.0 7 2 PNO649 pullulanase (EC 3.3) 31 12 25.0 8 2 PH1407 Ig heavy chain V r 32 12 25.0 8 2 PQ0701 unidentified 6.5/3 33 12 25.0 8 2 PQ0701 variant surface gl 34 12 25.0 8 2 NA21440 variant surface gl 35 12 25.0 9 2 NA4873 caldesmon - rabbit 36 11 22.9 5 1 HOROHA 37 11 22.9 5 2 CA3751 proctolin - Americ 38 11 22.9 5 2 NA4125 proctolin - Atlant 40 11 22.9 5 2 NA41215 copper resistance proctolin - Atlant 41 11 22.9 6 2 PTO280 42 11 22.9 6 2 BA4810 Ig proctolin - Atlant 43 11 22.9 7 2 B34818 ribosomal protein 44 11 22.9 8 2 S59622 metallothionein is 45 11 22.9 8 2 S59624 metallothionein is
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C;Species: Gastroclonium coulteri
C;Date: 07-Mar-1988 #sequence_revision 07-Mar-1988 #text.
C;Accession: F22565
R;Klotz, A.V.; Glazer, A.N.
J. Biol. Chem. 260, 4856-4863, 1985
A;Title: Characterization of the bilin attachment sites
A;Reference number: A22565; MUID:85182601; PMID:3886644
A;Accession: F22565
A;Molecule type: protein
A;Residues: 1-5 <KLO>
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C;Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 13-Mar-1997
C;Accession: A12016; B12016
R;Ohnoki, S.; Hong, B.S.; Buchanan, J.M.
Fed. Proc. 35, 1549, 1976
A;Title: Amino acid sequence at glutamine active site for FGAR-amidotransfer A;Reference number: A91459
A;Accession: A12016
A;Molecule type: protein
A;Residues: 1-7 <OHN>
A;Beperimental source: liver, peptide 1
A;Accession: B12016
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C;Date: 28-Oct-1994 #sequence_revision
C;Accession: C6L512
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A;Molecule type: protein
A;Residues: 1-5 <OH2>
A;Experimental source: liver,
C;Keywords: transferase
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R;Holder, A.A.; Cross, G.A.M.
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Mol. Biochem. Farasicol and variant surface
A;Title: Glycopeptides from variant surface
A;Title: Glycopeptides from Variant surface
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Pred. No. 2.8e+05;
2; Mismatches 2
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Pred. No. 2.8e+05;
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Pred. No. 2.8e+05;
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PMID:6163983
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Query Match
Best Local Similarity
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cytochrome oxidase subunit I - Atlantic hagfish mitochondrion (fragment) C;Species: mitochondrion Myxine glutinosa (Atlantic hagfish) C;Jate: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 21-Jul-20 (C;Accession: T13818 R;Delarbre, C; Barriel, V.; Tillier, S.; Janvier, P.; Gachelin, G. Mol. Biol. Evol. 14, 807-813, 1997 A;Title: The main features of the craniate mitochondrial DNA between the A;Reference number: Z17775; MUID:97398704; PMID:9254918 A;Retaus: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Residues: 1-8 DDA A;Residues: 1-8 DDEL>
                                                                                                                                                                   R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G. J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity A;Reference number: PT0222; MUID:91108337; PMID:1899102
A;Accession: PT0288
                                                                                                                                                                                                                                                                                             Ig heavy chain CRD3 region (clone 4-106) - human (fragment) C;Species: Homo sapiens (man) C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_ch C;Accession: PT0288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Yoshino, K.; Takao, T.; Shimonishi, Y.; Suzuki, N. FEBS Lett. 294, 179-182, 1991
A;Title: Determination of the amino acid sequence of an A;Reference number: S19329; MUID:92097763; PMID:1756858
A;Accession: S19329
                                                                       A;Molecule type: DNA
A;Residues: 1-9 <YAM>
A;Experimental source: B lyn
C;Keywords: heterotetramer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Molecule type: protein
A;Restdues: 1-9 <YOS>
C;Superfamily: unassigned animal peptides
F;3-8/Disulfide bonds: #status predicted
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C;Species: Stomopneustes variolus
C;Datcs: 04-Dec-1992 #sequence_revision 04-Dec-1992 #text_change 18-Aug-2000
C:Datcs: 04-Dec-1992
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C;Keywords: mitochondrion
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C;Genetics:
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R;Yoshino, K.; Takao, T.; Shimonishi, Y.; Suzuki, N.
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er; immunoglobulin
31.2%;
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Pred. No. 2.8e+05;
1; Mismatches 1
  Score 15;
Pred. No.
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2.8e+05;
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2.8e+05;
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RESULT 10
B45525
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C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 07-May-1999
C;Accession: G41946
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A; Residues: 1-9 <WHE>
C; Keywords: T-cell receptor
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A,Accession: G41946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Whetsell, M.; Mosley, R.L.; Whetsell, L.; Schaefer, F.V.; Miller, K.S.; Klein, J.R. Mol. Cell. Biol. 11, 5902-5909, 1991
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions. A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0605
A;Status: translation not shown
A;Residues: type: mRNA
A;Residues: 1-6 <FEE>
                                                                                                                   T-cell receptor beta chain V-D-J region (120-1L) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Species: Mus musculus (house mouse) C;Date: 17-Jul-1992 #text_change 30-May-1997 C;Accession: PT0605 C;Accession: PT0605 R;Feeney, A.J.

N; Exp. Med. 174, 115-124, 1991

J. Exp. Med. 174, 115-124, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:J03988 A;Note: the authors translated the codon GAA for residue 3 as C;Comment: The actin I gene contains no introns.
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A; Residues: 1-5 < WES>
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Pred. No. 2.8e+05;
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A;Molecule type: mRNA
A;Residues: 1-6 <FEE>
A;Experimental source: day 19 fetal thymus, strain
C;Keywords: T-cell receptor
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A,Title: Junctional sequences of fetal T cell receptor beta chains
A,Reference number: PT0509; MUID:91277601; PMID:1711558
A,Accession: PT0654
A,Status: translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T-cell receptor beta chain V-D-J region (121-1BK) - C;Species: Mus musculus (house mouse) C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 C;Accession: PT0654
R;Feeney, A.J.
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A;Title: Junctional sequences of fetal T cell receptor beta
A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0593
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  R;Zurbriggen, A.; Hogle, J.M.; Fujinami, R.S.
J. Exp. Med. 170, 2037-2049, 1989
A;Title: Alteration of amino acid 101 within capsid protein VP-1 changes the pathogenicit
                                                           capsid protein VP-1 - murine poliovirus (fragment)
C;Species: murine poliovirus, Theiler's encephalomyelitis virus
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
C;Accession: PL0184
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A; Residues: 1-7 < FEE>
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phosphatidylethanol amine-binding protein - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Accession: PN0043
R;KAto, H.
RAMSBAKI IGAKKAISHI 22, 245-259, 1996
A;Title: Analysis of proteins isolated by two dimensional electrophoresis of mouse neuro
A;Reference number: PN0041
A;Accession: PN0043
A;Molecula type: protein
A;Accession: PN0043
A;Molecula type: protein
A;Accession: PN0043
A;Residues: 1-8 cKAT>
A;Experimental source: neuroblastoma cell
C;Comment: The molecular mass is 23,500 and the pI is 4.8. The amino-terminus is blocked
C;Keywords: brain
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A;Accession: PL0184
A;Molecule type: genomic RNA
A;Residues: 1-8 <ZUR>
C;Keywords: capsid protein
Search completed: January 12, 2004, 14:31:53 Job time: 10.25 secs
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16-OCT-2001 (Re
28-FEB-2003 (Re
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P16339;
01-AUG-1990 (Rel. 15, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
15-DEC-1998 (Rel. 37, Last annotation update)
Locupressin (Diuretto neuropeptide F1/F2).
Locusta migratoria (Migratory locust)
Locusta migratoria (Migratory locust)
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Orthopteroidea; Orthoptera; Caelifera; Acridomorpha;
Acridoidea; Acrididae; Oedipodinae; Locusta.
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DISULFID 3 8
SEQUENCE 9 AA; 1010 MW; C469B3387B076EB9 CRC64;
    TISSUE=Suboesophageal ganglion, an MEDLINE=88077077; PubMed=3689410; Proux J.P., Miller C.A., Li J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastrop
Neogastropoda; Conoidea; Conidae; Conus
                                                                                                                NCBI_TaxID=7004;
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RESULT 6
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DT 01-NOV-1995 (Rel. 32, Created)
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ISOT_CYPCA
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Acher R., Chauvet J., Chauvet M.-T., Crepy D.;

Acher R., Chauvet J., Chauvet M.-T., Crepy D.;

Acher R., Chauvet J., Chauvet M.-T., Crepy D.;

Richaracterization of neurohypophyseal hormones from a fresh water bony fishs, the carp (Cyprinus carpio). Comparison with hormones from sea water bony fishs,";

Comp. Biochem. Physiol. 14:245-254(1965).
                                                                                                                                                                                                                                                                                                                                                        Cyprinus carpio (Common carp).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Cyprinus.
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Pfam; PF00220; hormone4: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Identification of an arginine vasopressin-like diuretic hormone from Locusta migratoria.",
Biochem. Biophys. Res. Commun. 149:180-186(1987).

-I- FUNCTION: DIURETIC HORMONE.
-I- SUBUNIT: F2 IS AN ANTIPARALLEL DISULFIDE LINKED DIMER OF F1.
-I- SUBUNATTY: BELLONGS TO THE VASOPRESSIN/OXYTOCIN FAMILY.

PIR; A29477; A29477.
                                                                                                                                                          SEQUENCE
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P81179;
15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
28-PEB-2003 (Rel. 41, Last annotation update)
28-PEB-2003 (Rel. 41, Last annotation update)
Endo-polygalacturonase (PG) (EC 3.2.1.15) (Fragment).
Diaprepes abbreviatus (Sugarcane rootstalk borer weevil).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Coleoptera; Polyphaga; Cucujiformia;
Phytophaga; Curculionidae; Entiminae; Entimini; Diaprepes.

NCBI TaxID-13040;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUB-Larval gut;

Doostdar H., McCollum T.G., Mayer R.T.;

Doostdar H., McCollum T.G., mayer R.T.;

"Purification and characterization of an endo-polygalacturonase from the gut of West Indies sugarcane rootstalk borer weevil (Diaprepes abbreviatus L.) larvae.";

Comp. Biochem. Physiol. 118B:861-867(1997).

-I- CATALYTIC ACTIVITY: Random hydrolysis of 1,4-alpha-D-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID MOD_RES
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"Phylogeny of neurophyophyseal peptides: isolation o
glumicocin (Ser 4 cln 8-coytocin) present in a carti
the ray (Raia clavata).";
Biochim. Biophys. Acta 107:393-396 (1965).
-i- FUNCTION. ANTIDIURETIC HORMONE.
-i- SIMILARITY: BELONGS TO THE VASOPRESSIN/OXYTOCIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Raja clavata (Thornback ray).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchii; Squalea; Hypnosqualea; Pristiorajea; Batoidea;
Rajiformes; Rajidae; Raja.
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                                                                                                                                                                                                                                                                                     -!- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED P:
9.4, ITS MW IS: 44.5 kDa.
-!- SIMILARITY: WEAK, TO OTHER POLYGALACTURONASES
Hydrolase; Glycosidase; Cell wall.
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Pfam; PF00220; hormone4; 1.
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                                                                                                                     l Similarity
2; Conserv
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YLSG 4
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                                                                                                                                                                                                                                                          1041 MW;
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annotation update)
                                                                                                                                                                                                                                                       1F49087042DB41BB CRC64;
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Pred. No.
                                                                                                                                                         Score 12; DB 1;
Pred. No. 1.3e+05;
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des: isolation of a new hormone,
resent in a cartilaginous fish,
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                                                                                                                                                                                    Length 9;
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RESULT 8
FAR3_HIRME
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01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last sequence update)
FMRFamide-like neuropeptide YLFF-amide.
Hirudo medicinalis (Medicinal leech)
Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida;
Arynchobdellida; Hirudiniformes; Hirudinidae; Hirudo.
                   SEQUENCE.

SEQUENCE.

SPECIES=L.polyphemus;

MEDLINE=90287800; PubMed=2356151;

Groome J.R., Tillinghast E.K., Townley M.A., Vetrovs A.,

Watson W.H. III, Hunt D.F., Griffin P.R., Alexander J.E.,

Shabanowitz J.;
                                                                                                                                                                MEDLINE=81225865; PubMed=6113690;
O'Shea M., Adams M.E.;
O'Shea M., Adams M.E.;
"Pentapeptide (proctolin) associated with an identified neuron.";
science 213:567-569(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRCT PERAM STANDARD; PRT; 5 AP

901373;

21-UUL-1986 (Rel. 01, Created)

21-UUL-1986 (Rel. 01, Last sequence update)

91-FEB-1995 (Rel. 31, Last annotation update)
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-!- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Carcinus maenas (Common shore crab) (Green crab).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Periplaneta americana (American cockroach),
Limulus polyphemus (Atlantic horseshoe crab),
Carcinus maenas (Common shore crab) (Green cr
                                                                                                                                                                                                                                                                                                                    Life
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NCBI_TaxID=6978, 6850,
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Blattidae; Periplaneta.
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MOD_RES
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Evans B.D., Pohl J., Kartsonis M.A.,
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                                                                                                                                                                                                                                                    SPECIES=P.americana;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Proctolin.
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                                                                                                                                                                                                                                                                                                                                          in insects
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of proctolin in the
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69D4073B30000000 CRC64;
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Pred. No.
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  central
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  nervous system
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"AF2, an Ascaris neuropeptide: isolation, sequence,
Peptides 14:423-430(1993).
[2]
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01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last sequence update)
01-FEB-1996 (Rel. 33, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        THE CRAB PERICARDIAL ORGANS. PIR; A01644; HOROHA. PIR; A60411; A60411.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -i- FUNCTION: STIMULATES CARDIAC OUTPUT AND HINDGUT MOTILITY,
MODULATES VISCERAL AND SKELETAL MUSCLE IN MANY ARTHROPODS.
-i- TISSUE SPECIFICITY: FOUND IN THE LATERAL WHITE NEURONS AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Identification and immunocytochemical localization of pericardial organs of the shore crab, Carcinus maenas.' Peptides 7:67-72(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SPECIES=C.maenae;
MEDLINE=86232789; PubMed=2872661;
Stangier J., Dircksen H., Keller R.;
                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                         Neuropeptide; Amidation.
MOD_RES 7 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SPECIES=P.redivivus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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Ascarididae; Ascaris.
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SEOUENCE 5 AA;
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Peptides 11:205-211(1990).
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69D4073B5B11E350 CRC64;
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Pred. No.
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. 1.3e+05;
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Rhabditida)
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P13268;
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Cowthorne M.;

Submitted (AUG-1998) to the SWISS-PROT data bank.

I FUNCTION: MEDIATES TETRAHYDROBIOPTERIN INHIBITION OF GTP

CYCLOHYDROLASE I. THIS INHIBITION IS REVERSED BY L-PHENYLALANINE (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                            ENTFA
CAD1_E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SUBUNIT: Homodimer (By similarity).
SWISS-2DPAGE; P99025; MOUSE.
INIT MET 0 0
NON TER 7 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOUSE
                                                                                                                   "Isolation and structure of the bacterial sex pheromone, induces plasmid transfer in Streptococcus faecalis."; FEBS Lett. 178:97-100(1984).
                                                                                                                                                               MEDLINE=85051889; PubMed=6437872;
Mori M., Sagakami Y., Narita M., Iso
Craig R.A., Clewell D.B., Suzuki A.
                                                                                                                                                                                                                                                               01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
01-FEB-1991 (Rel. 17, Last annotation update)
                                                                                                                                                                                                                                Enterococcus faecalis (Streptococcus faecalis).
Bacteria; Firmicutes; Lactobacillales; Enteroco
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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Hoogland C., Appel
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Mammalia; Eutheria;
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                                                                                      SEQUENCE
                                                                                                 Pheromone.
                                                                                                                                                                                                                     NCBI_TaxID=1351;
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ppel R.D.,
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100.0%; Pr
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66.7%;
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Binz P.-A., Hochstrasser
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                                                                                      047DD732C735B9C7
                                                    Score 11;
Pred. No.
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Pred. No. 1.3e+0; Mismatches
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                                                                                                                       THE CONJUGATIVE TRANSFER OF
                                                                                                                                                                                                                                   Enterococcaceae;
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COW2_CONPU
P58785;
28-FEB-2003
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J. Papt. Res. 54;3-99(1999).
-: SUBCELLULAR LOCATION: Secreted b.
-! TISSUB SPECIFICITY: Expressed by the venom du-
-! TISSUB SPECIFONMETRY. MW=888.4, METHOD=LSIMS.
-!- SIMILARITY: BELONGS TO THE CONTRYPHAN FAMILY.
TOXIN; Hydroxylation; D-amino acid.
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Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
Neogastropoda; Conoidea; Conidae; Conus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P05487;
01-NOV-1988 (Rel. 09, Created)
01-NOV-1988 (Rel. 09, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Arg-conopressin S.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY. STRAIN-Clipperton Island; TISSUE-Venom; MEDLINE-99388839; PubMed-10461743;
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28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation updat
Leu-contryphan-P.
                                                                         Gray W.R., Olivera B.M., Cruz L.J.,
"Peptide toxins from venomous Conus snails.";
Annu. Rev. Biochem. 57:665-700(1988).
-!- FUNCTION: Targets vasopressin-oxytocin related receptors
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUS SPECIFICITY: Expressed by the venom duct.
-!- TISSUS SPECIFICITY: BTAYERS DE VASOPRESSIN/OXYTOCIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=88058932; PubMed=3680228; Cruz L.J., de Santos V., Zafaralla Gray W.R., Olivera B.M.;
                PIR; B28495; B28495.
InterPro; IPR000981; Neurhyp_horm
                                                                                                                                                                                                                                                                                                                                               "Invertebrate vasopressin/oxytocin homologs. Characterization of peptides from Conus geographus and Conus straitus venoms."; J. Biol. Chem. 262:15821-15824 (1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conus striatus (Striated cone).
Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
Neogastropoda; Conoidea; Conidae; Conus.
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P19853;
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Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
Echinoidea; Euechinoidea; Gnathostomata; Clypeasteroida;
Clypeasteridae; Clypeaster.
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

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Minimum DB
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Result	Score	% Query Match Length DB	Length		ID		Description
ב :	45	100.0	9	20	AAY09526	- A-	Carcinoembryonic a
ν	45	100.0	9	21	AAB13750		Peptide fragment #
ω	45	100.0	9	22	AAE05124		Modified carcinoem
4.	45	100.0	9	22	AAB97818		Carcinoembryonic a
ហ	45	100.0	9	23	AAB47917		Modified CEA epito
ი	45	100.0	9	23	AAE19089		HLA-A24 restricted
7	43	95.6	9	20	AAY09527		Carcinoembryonic a
œ	40	88.9	9	18	AAW39723		Human carcina-embr
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ALIGNMENTS

SULT 1 X09526 AAY09526 standard; peptide; 9 AA.
AAY09526;
20-JUL-1999 (first entry)
Carcinoembryonic antigen peptide agonist SEQ ID NO:2.
Carcinoembryonic antigen; CEA; human; agonist; antagonist; immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer; adoptive transfer therapy; autoimmune reaction; immunotherapy.
Homo sapiens. Synthetic.
WO9919478-A1.
22-APR-1999.
22-SEP-1998; 98WO-US19794.
10-OCT-1997; 97US-0061589.
(USSH) US DEPT HEALTH & HUMAN SERVICES.
Barzaga E, Schlom J, Zaremba S;
WPI: 1999-326544/27.

THE PROPERTY OF SOME AND THE PROPERTY OF SOME

Peptide agonists

and antagonists of carcinoembryonal antigen

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Page 53; 72pp; English

invention

describes peptides (A) that comprise agonists (Ia) f human carcinoembryonal antigen (CEA) (Ia) are

or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (Ib) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent an autoimmune CEA-expressing cells). (Ia) are more active than native sequence (I) and generate a highly specific and systemic anti-CEA response. Cytotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).

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Costimulatory molecules have important roles in T-cell activation therefore the immune response. The present invention relates to recombinant vectors which comprise of foreign nucleic acid sequence encoding at least three costimulatory molecules: a B7 family molecules.
                                                                                                    Novel recombinant vector useful as immunogens and vaccines for stimulating and enhancing immunological responses to target cells and antigens expresses multiple co-stimulatory molecules such as B7-1,
                                                                  Claim
                                                                                          Antigens expresses
                                                                                                                                                                                                                                                                               12-NOV-1999;
                                                                                                                                                                                                                                                                                                         15-JUN-2000.
                                                                                                                                                                                                                                                                                                                                   WO200034494-A1
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                      colon polyp; Crohn's tumour; CEA.
                                                                                                                                                                                                                                                                                                                                                                                                            Human; T-cell; immune response; antigen; epitope; B7 family molecu Leukocyte function-associated antigen-3; LFA-3; Intercellular adhesion molecule-1; ICAM-1; vaccine; immunotherapy;
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                                                                                                                                                                                                              US DEPT HEALTH & HUMAN SERVICES THERION BIOLOGICS CORP.
                                                                Page 35;
                                                                                                                                                                                    Hodge J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                      98US-0111582.
                                                                                                                                                                                                                                                                                99WO-US26866.
                                                               188pp;
                                                                                                                                                                                                                                                                                                                                                                                                   disease; ulcerative colitis; breast lesion;
                                                                                                                                                                                    Panicali D;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Leukocyte function-associated antigen-3 (LFA-3, human CD58) and Intercellular adhesion molecule-1 (LGM-1, CD54) and optionally a foreign gene encoding a target antigen or immunological epitope. The present sequence is one such target antigen used in the present invention. The present invention would be useful for providing an enhanced immune response to the present target antigen. The vector of the present invention would be useful for providing an enhanced immune response to the present target antigen. The vector of the present invention may therefore be useful in immunotherapy for treating or preventing diseases caused by viruses, bacteria, protozoans, parasites, premalignant cells and tumour cells. The recombinant vector can be used to treat or prevent preneoplastic or hyperplastic states such as colon polyps, Crohn's disease, ulcerative colitis and breast lesions.
The invention relates to a method of enhancing an immune response against tumour-associated antigens (TAAs), such as GP100 and carcinoembryonic antigen (CEA) in an animal. The method involves priming of the animal with an inducing agent such as tetanus toxoid (TT) or diphtheria toxoid (DT), subsequently followed by administration of an inducing agent-antigen mixture. The method provides the enhancement or augmentation of the immune response to the antigen and/or improves a vaccination protocol by allowing use of less antigen. The immunisation of the animal with tumour-associated antigen is useful for the prophylactic or therapeutic
                                                                                                                                                                                                                 Enhancing immune response to antigen such as tumor antigen for treating cancer in an animal involves administering an inducing agent to the animal followed by administering inducing agent-antigen mixture -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tumour-associated antigen; TAA; cytostatic; vaccine; gene therapy; immune response; tetanus toxoid; TT; diphtheria toxoid; DT; prophylactic; cancer; therapeutic; carcinoembryonic antigen; CEA.
                                                                                                                                                                                   Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAE05124 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                              WPI; 2001-441790/47.
                                                                                                                                                                                                                                                                                                                                                                                                    05-JAN-2000; 2000US-0174587
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                                                                                                                                                                                   Page 31; 62pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 AA;
                                                                                                                                                                                                                                                                                                                               Barber BH,
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                                                                                                                                                                                                                                                                                                                               Sambhara S,
                                                                                                                                                                                   English
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Pred. No. 9.3e+05;
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                                                                               The present invention describes a method for inducing an immune response, CC in an animal, to a tumour antigen (Ag) comprising administering Ag, or CC nucleic acid (I) that encodes it, to a lymphatic site. Cynomolgus monkeys CC (Macaca fascicularis) were injected with a modified form of gp100 antigen CC (a) into the left inguinal lymph node or (b) subcutaneously. Both animals CC (a) developed a cell-mediated response (indicated by production of CC interferon-gamma from T lymphocytes when exposed to gp100 peptides), but CC only 2 of 4 animals of (b) did so. Also animals in (a) produced a far CC greater antibody response to gp100. The method is used in immunotherapy CC of a wide range of cancers through induction of a specific immune CC response (humoral and cellular) against the tumour antigens. When CC administered to a lymphatic site, Ag (or (I)) induces a stronger immune CC response than administration by other routes and may also break tolerance to Ag AaB97708 and AaB97709 represent gp100 epitopes; AAB97710 to CC (AAB97815 represent peptides derived from gp100 which stimulate interferon CC (ITN) gamma production; AAH20120 encodes the modified carcinombryonic antigen (CEA) CC protein given in AAB97817; and AAB97818 represents a CEA modified antigen invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        treatment of cancer. The present sequence is modified carcinoembryonic antigen (CEA) peptide fragment related to the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Berinstein N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-OCT-1999; 99US-0160879
07-AUG-2000; 2000US-0223325
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carcinoembryonic antigen (CEA) modified antigen SEQ ID NO:113.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to tumor antigen, useful in immunotherapy the antigen to a lymphatic site -
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Query Match Best Local Similarity

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Score 45; DB 23; Pred. No. 9.3e+05;

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Matches
                                  This sequence represents a modified CAP-1 epitope of carcinoembryonic antigen (CEA) which was used as part of the CEA agonist polypeptide of the invention. The modification of position 6 of this peptide from Asp to Asm increases its immunogenicity. The CEA agonist polypeptide of the invention, or DNA encoding it, are useful for:

(1) inducing an immune response in an animal directed against a CEA protein or fragment, CEA agonist, a CEA epitope, a modified CEA epitope, cells expressing or binding a CEA protein or fragment; and gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostate carcinoma cell in a patient, hence is useful for manufacture of a medicament for the treatment of cancer.
                                                                                                                                                                                                                                                                                                                                                                          Carcinoembryonic antigen agonist polypeptide for inducing an immune response in animal against antigen and for inhibiting an epitope antigen expressing carcinoma cell, comprises a modified antigen epitope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-FEB-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified CEA epitope,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Berinstein N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-JUL-2000; 2000US-222043P
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THERION BIOLOGICS.
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                                                                                                                                                                                                                                                                                                                    38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tartaglia J,
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Pred. No. 9.3e+05;
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CC HLA-A24 restricted target antigen CEA immunological epitope #3 AAE19089 standard; peptide; 9 (first entry) B

Homo sapiens. neck; breast; prostate; colorectal; melanoma; myeloidysplastic syndrom metastatic breast skin lesion; corticosteroid therapy; erythropoietin; Human leukocyte antigen; HLA; pharmaceutical composition; target antigen; immunological epitope; replication-defective virus; RDV; immune response; chemotherapy; granulocyte-monocyte-colony stimulating factor; cytostatic; GM-CSF; MHC; major histocompatibility complex; tumour; head; pancreatic; cytopenia; neutropenia; vaccine; immunostimulant.

20-DEC-2001. WO200195919-A2

15-JUN-2001; 2001WO-US19201.

15-JUN-2000; 2000US-211717P

US DEPT HEALTH & HUMAN SERVICES. THERION BIOLOGICS CORP.

Schlom J, Greiner JW, Kass E, Panicali D;

WPI; 2002-205852/26

Composition for enhancing immune responses, particularly anti-tumor responses and treating neutropenia, cytopenia, comprises replication-defective virus encoding granulocyte-monocyte-colony stimulating factor

Claim 9; Page 15; 118pp; English

The present invention relates to a pharmaceutical composition comprising CC a replication-defective virus (RDV) encoding granulocyte-monocyte-colony CC stimulating factor (GM-CSF). The invention is useful for enhancing cell-mediated or humoral immune response in an individual, by enhancing CC migration of APC expressing CD11c^+/I-Ab^+, major histocompatibility CC complex (MMC) class II, at an injection site, regional lymph node at a CC tumour site, APC proliferation or function, CD4^+T or CD8^+T cell CC activation, interleukin (II)-2, interferon (IFN)-gamma or tumour necrosis CC factor (TNF)-alpha production or their combinations. The composition CC enhances an antigen-specific T-cell response in an individual to a target individual with a head tumour, neck, breast, pancreatic, prostate, coloractal or metastatic tumour or melanoma, or metastatic breast skin CC coloractal or metastatic tumour or melanoma, or metastatic breast skin CC resulting from chemotherapy, corricosteroid therapy, irradiation or an CC infection, by raising the neutrophil count to normal levels and for treating cytopenias in patients with myeloidysplastic syndrome in CC combination with erythropoietin, by increasing neutrophil count and CC resulting by precursors. The composition enhances immune response to composition for succines such as DPT, Td, DtaP, Hib, DtaP-Hib, MMR, Hepatitis A, CC hepatitis B, lyme's disease, influenza, tetravalent meningococcal coloractal epitope.

CC immunological epitope. immunological epitope

Sequence 9 AA;

RESULT 8 AAW39723

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1 YLSGADLNL 9

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8; Similarity

Conservative

95.6%;

Score 43; Pred. No.

9.3e+05;

DB 20;

Length 9;

Mismatches

Indels

<u>,</u>

Gaps

0

Query Match Best Local : Matches

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Matches
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Best Local :
                          The present invention describes peptides (A) that comprise agonists (Ia) or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (Ib) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects, to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent attack on normal but CEA-expressing cells). (Ia) are more active than native sequence (I) and generate a highly specific and systemic anti-CEA response. Cytotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carcinoembryonic antigen; CEA; human; agoniat; antagoniat; immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer; adoptive transfer therapy; autoimmune reaction; immunotherapy.
   Sequence
                                                                                                                                                                                                                                           Claim 5; Page 53; 72pp; English.
                                                                                                                                                                                                                                                                          Peptide agonists and antagonists of carcinoembryonal antigen
                                                                                                                                                                                                                                                                                                        WPI; 1999-326544/27.
                                                                                                                                                                                                                                                                                                                                    Barzaga E,
                                                                                                                                                                                                                                                                                                                                                                                               10-OCT-1997;
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   AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US19794.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antigen peptide agonist
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Pred. No.
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RESULT 9
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AC AAW7
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DT 16-N
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DE CEA
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KW Tyrc
KW Cytc
                                                                                                                                                                                                                                                                                          cc immunogenic T-cell peptide epitopes present in polypeptide antigens. The ccl binding to an HLA (human leukocyte antigen) class I molecule and CC measuring the binding of this epitope peptide to the HLA class I competide. The stability of binding of the peptide to the HLA class I competide. The stability of binding of the peptide and MHC (major CC histocompatability complex) class I molecule is measured on intact human B cells carrying the MHC molecule at their cell surfaces. The method can CC disease associated with the polypeptide, e.g. cancers or AIDS. The ccl peptide epitopes are especially T-cell peptide epitopes with strong canti-tumour and anti-viral immune responses. Peptide AAM39723 is derived the human carcino-embryonic antigen (CEA) and has the ability to complex in allele HLA-A2.1.
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; Page 85; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Method of selecting T cell peptide epitope(s) stability of HLA class I-peptide complexes on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-549891/50
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26-APR-1996;
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                                                                                          AAW77134;
                                                                                                                    AAW77134 standard; peptide; 9
                                                                                                                                                                                                                                                                                         Sequence
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Tyrosinase; tyrosinase cytotoxic lymphocyte response; cytotoxic T lymphocyte; cysteine-depleted; melanoma.
                                       CEA synthetic
                                                                 16-NOV-1998
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                                                                                                                                                                                                                                                                                          9 AA;
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                                                                 (first entry)
                                       peptide epitope
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96EP-0201145.
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Pred. No. 9.3e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-AUG-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytotoxic T lymphocyte; CTL; major histocompatibility complex; MHC; human leukocyte antigen; HLA; tumour associated antigen; cancer; antigen presenting cell; APC; immunogenic peptide; immune disorder; viral infection; AIDS; hepatitis; bacterial infection; malaria; CEA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CEA derived HLA-A2.1 binding peptide 2 (residues 605-613).
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                                                                  (EPIM-) EPIMMUNE INC.
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    comprises disease specific
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human leukocyte antigen; binding; immunogenic; glycoprotein; MHC; HLA; immune response; T cell activation; major histocompatibility complex; cytotoxic T lymphocyte; CTL; tumour rejection; viral infection; cancer; prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma;
                                Sette A,
                                                                                                                                                                                                                  13-MAR-1998;
                                                                                                                                                                                                                                                                                   16-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
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                                                                                              (EPIM-) EPIMMUNE INC
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                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vaccine; immunisation.
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                                Kubo RT,
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                             Sidney J,
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Pred. No. 9.3e+05;
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Best Local
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Peptide agonists and antagonists of carcinoembryonal antigen
                                                                 WPI; 1999-326544/27.
                                                                                                                                  Barzaga E,
                                                                                                                                                                                                                                                                                                                                                                                                           22-APR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carcinoembryonic antigen peptide agonist CAP-1
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                                                                                                                                                                                                                                                                                                                                         22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
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. 9.3e+05;
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Claim 1;

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English

invention

describes peptides (A) that comprise agonists (Ia)

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RESULT 13
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ID AAB13
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Matches 8
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                                                                                                                                                                                                                                                        Novel recombinant vector useful as immunogens and vaccines for stimulating and enhancing immunological responses to target cells antigens expresses multiple co-stimulatory molecules such as B7-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; T-cell; immune response; antigen; epitope; B7 family molecule; Leukccyte function-associated antigen-3; LFA-3; LFA-3; Intercellular adhesion molecule-1; ICAM-1; vaccine; immunotherapy; colon polyp; Crohn's disease; ulcerative colitis; breast lesion;
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                          Costimulatory molecules have important roles in T-cell active therefore the immune response. The present invention relates recombinant vectors which comprise of foreign nucleic acid se encoding at least three costimulatory molecules: a B7 family
                                                                                                                                                                          Claim 18; Page 35;
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function-associated antigen-3 (LFA-3,
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BIOLOGICS CORP.
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  acid sequences family molecule, CD58) and
                                                                                                                 activation
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comprising amino acid residues 571-579. The peptide was used as a reference peptide in comparison with human telomerase reverse transcriptase (hTRT) HLA-2.1+ restricted peptide p540 (see AAB82772) in a HLA-A2.1 binding/stabilisation assay. The induction of CTL responses in vitro and in vivo, and the susceptibility to 19sis of tumour cells of various origins by hTRT CTL suggest that hTRT could serve as a universal cancer vaccine for humans. A claimed universal vaccine for treating tumours of any origin comprises at least 1 hTRT peptide. The peptide is 7-15 amino acid residues in length and may be modified to enhance binding to the major histocompatibility complex. Also claimed is a method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene encoding a target antigen or immunological epitope. The present sequence is one such target antigen used in the present invention. The present sequence is a tumour-associated antigen. The vector of the present invention would be useful for providing an enhanced immune response to the present target antigen. The vector of the present invention may therefore be useful in immunotherapy for treating or preventing diseases caused by viruses, bacteria, protozoans, parasites, premalignant cells and tumour cells. The recombinant vector can be used to treat or prevent preneoplastic or hyperplastic states such as colon polyps, Crohn's disease, ulcerative colitis and breast lesions.
                                                                                                                                                                                                                                                          Vaccine for initiating and enhancing a cytotoxic T lymphocyte response, for treating cancers or tumours or for inducing immune response against tumours, comprises a telomerase reverse transcriptase peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telomerase reverse transcriptase; hTRT; human; cytotoxic T lymphocyte; major histocompatibility complex; tumour; human leucocyte antigen; HLA-A2.1; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        carcinoembryonic
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                                                                                                                                                                       The present sequence is that of a carcinoembryonic comprising amino acid residues 571-579. The peptic
                                                                                                                                                                                                                            Example 1; Page 12; 52pp; English
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15-FEB-2001;
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2001US-0182685
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RESULT 15
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                                                                                                                                                                                                                                                                The invention relates to a method of enhancing an immune response against tumour-associated antigens (TAAs), such as GP100 and carcinoembryonic antigen (CEA) in an animal. The method involves priming of the animal with an inducing agent such as tetanus toxoid (TT) or diphtheria toxoid (DT), subsequently followed by administration of an inducing agent-antigen mixture. The method provides the enhancement or augmentation of the immune response to the antigen and/or improves a vaccination protocol by allowing use of less antigen. The immunisation of the animal with tumour-associated antigen is useful for the prophylactic or therapeutic treatment of cancer. The present sequence is carcinoembryonic antigen (CEA) peptide fragment related to the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enhancing immune response to antigen such as tumor antigen for treating cancer in an animal involves administering an inducing agent to the animal followed by administering inducing agent-antigen mixture -
                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2; Page 31; 62pp; English.
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Local Similarity 88.9%;
les 8; Conservaring
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Similarity 88.9%;
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                                                                                                                        Score 40; DB 22;
Pred. No. 9.3e+05;
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Pred. No. 9.3e+05;
L; Mismatches 0
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inducing and enhancing a CTL response against cancer cells, involving harvesting blood leucocytes, pulsing with hTRT, and contacting cancer cells with the pulsed leucocytes. A method for targeting CTL to tumour cells is also claimed, and involves administering a hTRT peptide to a mammal, especially a cancer patient.

Search completed: January 12, 2004, 14:28:23 Job time : 33.25 secs .

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                      A Geneseq 19Jun03:*

1: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:*
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SUMMARIES
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Result No.	Score	% Query Match Length DB	ength	DB	Ħ	Description
1	45	100.0	9	20	AAY09528	Carcinoembryonic a
N	43	95.6	9	18	AAW39723	Human carcina-embr
ω	43	95.6	9	19	AAW77134	. CEA synthetic pept
4	43	95.6	9	19	AAW70045	CEA derived HLA-A2
ហ	43	95.6	9	20	AAY47655	Immunogenic peptid
6	43	95.6	9	20	AAY09525	Carcinoembryonic a
7	43	95.6	9	21	AAB13749	Peptide fragment #
æ	43	95.6	9	22	AAB82776	
9	43	95.6	9	22	AAE05123	Carcinoembryonic a

45	4.4.	4.2	41	40	39	38	37	36	<u>კ</u>	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
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	98			AAB27207	ABP71908	ABP71902	AAM49862	AAB26339	AAW54298	ABJ19952	AAU24335	AAU24043	AAU23920	AAW00690	AAU82064	AAY09529	AAW00680	AAB75854	AAE19089	AAB47917	AAB97818	AAE05124	AAB13750	AAY09526	AAB99681	AAU26560	417	AAY09527	908	AAU95893	907	AAE26805	0	AAE02673
uman CASB61	Fragment of enzyme	Ker between	antiarrhy	ᡤ	D. radiodurans crt	R. erythropolis AN	Human D40 associat	B61 8	83	MHC binding peptid	lass	class	Human MHC class I	윩	CEA antigenic pept	embryoni	Peptide comprising	associat	к	rt	e	Modified carcinoem	Peptide fragment #	oryoni	HLA A2 binding CTL	Human Leukocyte An	HLA binding peptid	onic	HLA-A24 restricted	Immunogenic peptid	lae	Human HLA-A2.1 res	Human tumour CEA e	Human CEA epitopic

ALIGNMENTS

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WPI; 1999-326544/27.	Barzaga E, Schlom J, Zaremba S;	(USSH) US DEPT HEALTH & HUMAN SERVICES.	10-OCT-1997; 97US-0061589.	22-SEP-1998; 98WO-US19794.	22-APR-1999.	WO9919478-A1.		Synthetic	Homo sapiens.	adoptive transfer therapy; autoimmune reaction; immunotherapy.	bladder; ovarian; lung; prostatic; T cell proliferation; cancer;	a			Carcinoembryonic antigen peptide agonist SEQ ID NO:4.	70-00H-1999 (FITED GHCT)		MAI 0 9 3 2 0 }		AAY09528 standard; peptide; 9 AA.	AAY09528	RESULT 1

agonists

and antagonists

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carcinoembryonal antigen

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RESULT 2
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Best Local S
Matches 9
Peptides AAW39430-W39734 are used in a novel method for the selection immunogenic T-cell peptide epitopes present in polypeptide antigens. T method involves the identification of peptide sequences capable of binding to an HLA (human leukocyte antigen) class I molecule and measuring the binding of this epitope peptide to the HLA class I peptide. The stability of binding of the peptide and MHC (major histocompatablilty complex) class I molecule is measured on intact hum
                                                                                                                                                                                                                                                                                  Method of stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes peptides (A) that comprise agonists (Ia) or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (Ib) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects, to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent an attack on normal but CEA-expressing cells). (Ia) are more active than native sequence (I) and generate a highly specific and systemic anti-CEA response. Cytotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T cell epitope; immune response; human leukocyte antigen; HLA Class I; vaccine; immunogenic; major histocompatablilty complex; MHC; B cell;
                                                                                                                                                                                                                              Example 3; Page 85; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-549891/50
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26-APR-1996;
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96EP-0201145.
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Query Match
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Matches 8
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Matches 8
                                                                                                                                                                                                  The peptide epitope AAW77119-W77138 were created for human tumour-specific cytotoxic T lymphocyte response. These peptides are are cysteine- depleted mutants of a native disease-specific CTL epitope. The cysteine- depleted CTL epitopes elicit a stronger or more specific CTL response than the native epitope. The epitopes can be used in a disease-specific immunogen to protect a mammal against disease in particular melanomas. The peptides may also be used to screen a sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B cells carrying the MHC molecule at their cell surfaces. The method c be used to select peptide epitopes for generating vaccines against a disease associated with the polypeptide, e.g. cancers or AIDS. The peptide epitopes are especially T-cell peptide epitopes with strong anti-tumour and anti-viral immune responses. Peptide AAW39723 is derived from the human carcino-embryonic antigen (CEA) and has the ability to bind to the human MHC Class I allele HLA-A2.1.
                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 27; 93pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disease specific immunogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
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                                                                                                                                                     cross-reactive
                                                                                                                                                                             for the presence of an antigen with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Engelhard VH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JAN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lymphocyte
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                                                                                                      9 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              epitope used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tyrosinase cytotoxic lymphocyte response; lymphocyte; cysteine-depleted; melanoma.
  Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kittlesen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           - comprises disease specific cytotoxic elicit melanoma specific CTL response
  Score 43; DB
Pred. No. 9.3e
1; Mismatches
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Pred.
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No.
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9.3e+05;
                                                    DB 19;
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carcinoembryonic antigen (CEA). The peptides can bind to a human CC leukocyte antigen (HLA), HLA-A2.1 and are used to exemplify the method comprises contacting immunogenic peptides from CC vitro. The method comprises contacting immunogenic peptides from an CC antigen that binds class I major histocompatibility complex (MHC) CC molecules with antigen presenting cells (APCs) pretreated with CC pretreatment growth factors, and incubating the APCs with purified CD8 cells in the presence of at least 2 incubation growth factors, thereby producing antigen-specific CTLs. A method for specifically killing CC target cells in a human patient is also provided which comprises obtaining a fluid sample containing CTLs from a patient, contacting the APCs contacting the APCs contacting the APCs are incubated with the cytotoxic growth factors, thereby producing activated CTLs which are contacted with gre-treatment growth CC APCs are incubated with the cytotoxic growth factors, thereby producing activated CTLs which are contacted with a carrier to form a composition. CC The composition can then be administered to the patient. The activated CTLs can be used for treating cancers, immune disorders, viral CC infections, AIDS, hepatitis, bacterial infection, fungal infection, XX
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                                   Query Match
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Matches 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Production of antigen-specific cytotoxic T cells - by incubating immunogenic peptide(s) from antigen that binds class I major histocompatibility complex molecules with pre-treated antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-437445/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Celis E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human leukocyte antigen; HLA; tumour associated antigen; cancer; antigen presenting cell; APC; immunogenic peptide; immune disorder; viral infection; MIDS; hepatitis; bacterial infection; malaria; CEA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CEA derived
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 6; Page 75; 104pp; English.
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                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fungal infection; tuberculosis; melanoma; carcinoembryonic antigen
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                                     Similarity
8; Conserv
   YLSGANINL 9
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                                     Conservative
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                                                     95.6%;
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                                   Score 43; DB 19;
Pred. No. 9.3e+05;
1; Mismatches 0
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RESULT 5
AAY47655
ID AAY4
                                                                                                                                                                                                                                                                                                    CA AAY45390 to AAY48214 represent specifically claimed immunogenic peptides CC having a human major histocompatibility complex (MHC) Class I (also CC known as human leukocyte antigen (HLA)) binding motif. The immunogenic CC peptides can bind to a specific HLA allele (i.e. HLA-A subtypes CC HLA-A2.1, A1, A3.2 or A24.1 or HLA-B or C) and induce a cytotoxic T cell CC response against the antigen from which the peptide is derived. CC Cytotoxic T lymphocytes (CTLs) which destroy antigen-bearing cells are CC normally induced by an antigen in the form of a peptide fragment bound CC to a HLA molecule, rather than the intact foreign antigen itself, and CC are particularly important in tumour rejection and in fighting viral CC infections. The peptides are therefore useful therapeutically to treat CC or prevent viral infections and cancers in mammals (especially humans) CC e.g. prostate cancer, hepatitis B and C, AIDS, and renal carcinoma. CC Individuals susceptible or otherwise at risk of viral infection or CC cancer, or used to treat chronic or acute conditions. They are also CC useful diagnostically, and can be used to induce a cytotoxic T cell cresponse, by contacting a cytotoxic T cell with the peptide e.g. to CC produce CTLs ex vivo for infusion back into a patient. The cCC polynucleotides encoding the immunogenic peptides are also useful contacting and for immunisation as above.
                                                                                                                       Matches
                                                                                                                                                            Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New immunogenic peptides with HLA binding motif, useful in treatment and diagnosis of cancers and viral diseases \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-551214/46.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunogenic peptide having a human leukocyte antigen binding
                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 118; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-MAR-1998;
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                                                               1 YLSGANINL 9
                                                                                                                          Similarity
8; Conserv
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YLSGANLNL 9
                                                                                                                                                                                                                                                            9 AA;
                                                                                                                              Conservative
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                                                                                                                                                            95.6%;
                                                                                                                                                            Score 43;
Pred. No.
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                                                                                                                                                               9.3e+05;
                                                                                                                                                                                             DB 20;
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                                                                                                                                                                                          Length 9;
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Best Local S
Matches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes peptides (A) that comprise agonists (Ia) or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, particularly for treating gastrointestinal, breast, be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (Ib) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects, to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent an attack on normal but CEA-expressing cells). (Ia) are more active than native sequence (I) and generate a highly specific and systemic anti-CEA response. Cytotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).
Human; T-cell; immune response; antigen; epitope; B7 family molecu Leukocyte function-associated antigen-3; LFA-3; Leukocyte function-associated antigen-3; LFA-3; Intercellular adhesion molecule-1; ICAM-1; vaccine; immunotherapy; colon polyp; Crohn's disease; ulcerative colitis; breast lesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carcinoembryonic antigen; CEA; human; agonist; antagonist; immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer; adoptive transfer therapy; autoimmune reaction; immunotherapy.
                                                                                                                                         Peptide fragment # 1 from human
                                                                                                                                                                                              02-FEB-2001
                                                                                                                                                                                                                                                                                                   AAB13749 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide agonists and antagonists of carcinoembryonal antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-326544/27.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9 AA;
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Pred. No. 9.3e+05;
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                                                                                                                                         CEA.
                                                                                 epitope; B7 family molecule;
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                                                                                                                                                                                                                                                                   Telomerase reverse transcriptase; hTRT; human; cytotoxic T lymphocyte; major histocompatibility complex; cancer; tumour; human leucocyte antigen; HLA-A2.1; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel recombinant vector useful as immunogens and vaccines for stimulating and enhancing immunological responses to target ceantigens expresses multiple co-stimulatory molecules such as B LFA-3, ICAM-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                              carcinoembryonic
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carcinoembryonic antigen peptide
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les 8; Conser
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88.9%;
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Matches
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                                                                                                                                                                                                                                                                                          Tumour-associated antigen; TAA; cytostatic; vaccine; gene therapy; immune response; tetanus toxoid; TT; diphtheria toxoid; DT; prophy cancer; therapeutic; carcinoembryonic antigen; CEA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-FEB-2000; 2000US-0182685.
15-FEB-2001; 2001US-0182685.
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                                                                                                                                                                                                                                             Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                       Carcinoembryonic antigen (CEA) peptide, CAP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-536552/59
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                                               05-JAN-2000; 2000US-0174587
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                                                                                                                                               12-JUL-2001
                                                                                                                                                                                               WO200149317-A2
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  (AVET ) AVENTIS PASTEUR LTD
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8; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence is that of a carcinoembryonic
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1; Mismatches
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RESULT 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tumour-associated antigens (TAAs), such as GP100 and carcinoembryonic antigen (CEA) in an animal. The method involves priming of the animal with an inducing agent such as tetanus toxoid (TT) or diphtheria toxoid (DT), subsequently followed by administration of an inducing agent antigen mixture. The method provides the enhancement or augmentation of the immune response to the antigen and/or improves a vaccination protoco by allowing use of less antigen. The immunisation of the animal with tumour-associated antigen is useful for the prophylactic or therapeutic treatment of cancer. The present sequence is carcinoembryonic antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Enhancing immune response to antigen such as tumor antigen for treating cancer in an animal involves administering an inducing agent to the animal followed by administering inducing agent-antigen mixture
                                                                                                                                                                                                                                                                                                                                                          Human; cytostatic; antibacterial; antifungal; gene therapy; vaccine; antiviral; tumour; epitope; glycoprotein; hepatitis B virus; HBV; immune response; CTL; cytotoxic T lymphocyte; CEA; HLA; human leucocyte antigen.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Human CEA epitopic peptide.
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                                                                                  New polynucleotide comprising at least one viral, fungal, bacterial, tumor epitope of an antigen, capable of inducing a cellular response
                                                                                                                                                                                                                                           29-SEP-2000; 2000WO-EP09902
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                                                                                                                                                                                  (INSP ) INST PASTEUR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CEA) peptide fragment related to the invention.
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                                                                                epitope of an antigen,
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                                                     Page 23; 70pp; English.
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The invention relates to polynucleotide containing at least a part of the coding sequence of the middle glycoprotein of hepatitis B virus (HBV) in which is inserted a DNA sequence coding for an epitope

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                                                The present invention relates to an isolated or purified polynucleotide containing a DNA sequence coding for at least one tumour epitope of a tumour antigen innerted into part of the coding sequence of the middle glycoprotein of the Hepatitis B virus (HBV). The polynucleotide is useful for optionally evaluating cytotoxic responses in the individual's lymphocyte population. It induces an immune response against at least one tumour specific antigen or tissue specific antigen. The vector comprising the polynucleotide induces in vivo, cellular and/or humoral immune response. The composition comprising the polynucleotide induces in vivo, cytotoxic Tlymphocyte (CTL) against one or more antigens or repitopes present on the hybrid protein. The polynucleotide is also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    an antigen, capable of inducing a cellular response. Nucleic acids are compositions of the invention are useful for inducing in vivo a CTL (cytotoxic T lymphocyte) response against several epitopes of one or more, bacterial, viral, fungal, or tumour antigens. A composition of the invention produces an immune response against HIV antigen and are used in the production of vaccines. The polynucleotides of the invention are also used in gene therapy. The present sequence is human CEA epitopic peptide. This peptide elicits strong HLA (human leucocyte antigen)-A2.1-restricted CTL response in mice.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inserted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               virus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polynucleotide having DNA sequence encoding tumor antigen epitope
ted in part of coding sequence of middle glycoprotein of hepatitis
us, used to induce immune response against tumor-specific antigen
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response; cytotoxic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour epitope; cytostatic; immunostimulant; gene therapy;
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epitopes present on the hybrid protein. The polynucleotide is als useful in gene therapy.

The present sequence is a human tumour CEA epitopic peptide. This

RESULT 13 ABG79073

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                                                                                                                                                                                                                                              The invention relates to a method of treating a subject with cancer. The method involves combining the CD+8 cells, which are stimulated with non naturally occurring antigen-presenting cell (nnAPC) line, with adherent blood monocytes and inoculating the subject with CD8+ suspension. The method is useful for treating cancer e.g. ovarian cancer, breast cancer and melanoma etc. It is also useful in cell therapy. The present sequence is human leukocyte antigen A2 (HLA-A2).1 restricted peptide epitope used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Treating a subject with cancer comprises combining the CD+8 cells, which are stimulated with non-naturally occurring antigen-presenting cell line, with adherent blood monocytes and inoculating the subject
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cell line, with adherent l
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leucocyte antig
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                                                                                                                 Score 43;
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ABG79073 standard; Peptide; 9 AA

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                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lymphoma; sarcoma; lung cancer; non-Hodgkin's lymphoma; leukaemia;
Hodgkin's lymphoma; uterine cancer; cervical cancer; bladder cancer;
kidney cancer; adenocarcinoma; breast cancer; prostate cancer;
ovarian cancer; pancreatic cancer; epitope; vaccine; dendritic cell;
tumour infiltrating lymphocyte; TIL; human leukocyte antigen; HLA;
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                                                                          Score 43; DB 23;
Pred. No. 9.3e+05;
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RESULT 15
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RESULT 14
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                                                                                                                                                                                                                                                                                                                                       The invention describes a composition comprising an immunogenic peptide having a human leucocyte antigen (HLA)-A2.1 binding site. The peptides bind specifically to HLA-A2.1, to cause T cell activation and thus a cytotoxic T cell response. The peptides and the nucleic acids that encodes them, are used, in vivo or ex vivo, for treatment of viral infections (hepatitis B or C; Epstein-Barr; human immune deficiency; Kaposi sarcoma; human papilloma; Lassa fever or cytomegaloviruses); tumours including prostate cancer, renal carcinoma and lymphona (where directed to prostate-specific antigen, p53, carcino-embryonal antigen, Her2/neu or melanoma antigens); infection by Mycobacterium tuberculosis or protozoa (directed to trypanosome surface antigen); and condlyloma cacuminatum. The peptides are suitable for use in peptide with the human leucocyte antigen (HLA)-A2.1 binding site, described in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HLA-A2.1 binding peptide; cytostatic; virucide; anti-HIV; hepatotropic; human immunodeficiency virus; antiinflammatory; antibacterial; vaccine; protozoacide; immunosuppressant; immunogenic peptide; T cell activation; human leucocyte antigen binding site; cytotoxic T cell response; viral infection; hepatitis; Epstein-Barr virus; papilloma virus; human immunodeficiency virus; HIV; Kaposi sarcoma; Lassa fever virus; cytomegalovirus; tumour; prostate cancer; renal carcinoma; lymphona; prostate-specific antigen; p53; carcino-embryonal antigen; melanoma antigen; Mycobacterium tuberculosis; protozoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 27; 35pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           useful
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                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Immunogenic peptide with human leucocyte antigen-A2.1 binding site, useful for treating e.g. viral infection or tumours
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          trypanosome surface antigen; condlyloma acuminatum.
                                                                                                                                                                                                                                                                                                                      invention
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21-MAY-2002 AAE19088;

(first entry)

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The present invention relates to a pharmaceutical composition comprising CC a replication-defective virus (RDV) encoding granulocyte-monocyte-colony CC stimulating factor (GM-CSF). The invention is useful for enhancing cCC mediated or humoral immune response in an individual, by enhancing CC migration of APC expressing CD11c^+/I-Ab^+, major histocompatibility CC complex (MHC) class II, at an injection site, regional lymph node at a CC tumour site, APC proliferation or function, CD4^+T or CD8^+T cell CC activation, interleukin (II)-2, interferon (IFN)-gamma or tumour necrosis CC factor (TNP)-alpha production or their combinations. The composition CC enhances an antigen-specific T-cell response in an individual to a target antigen or its immunological epitope and an anti-tumour response in an individual to a target CC individual with a head tumour, neck, breast, pancreatic, prostate, CC colorectal or metastatic tumour or melanoma, or metastatic breast skin CC lesion. The invention is further useful for treating neutropenia CC resulting from chemotherapy, corricosteroid therapy, irradiation or an CC combination with erythropoietin, by increasing neutrophil count and CC combination with erythropoietin, by increasing neutrophil count and CC combination with erythropoietin, by increasing neutrophil count and CC combination as DPT, Td, DtaP, Hib, DtaP-Hib, MMR, Hepatitis A, CC large of the composition of travelent meningococcal count and compatities B, lyme's disease, influenza, tetravalent meningococcal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Composition for enhancing immune responses, particularly anti-tumor responses and treating neutropenia, cytopenia, comprises replication-defective virus encoding granulocyte-monocyte-colony
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human leukocyte antigen; HLA; pharmaceutical composition; target antigen; immunological epitope; replication-defective virus; RDV; immune response; chemotherapy; granulocyte-monocyte-colony stimulating factor; cytostatic; GM-CSF; MHC; major histocompatibility complex; tumour; head; pancreatic;
Sequence
                                                                 polysaccharide, pneumococcal polysaccharide, anthrax, cholera, plague, yellow fever and Bacillus Calmette-Guerin vaccine. The present sequence is human leukocyte antigen (HLA)-restricted target tumour antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 9; Page 15; 118pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                stimulating factor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            neck; breast; prostate; colorectal; melanoma; myeloidysplastic syndrom
metastatic breast skin lesion; corticosteroid therapy; erythropoietin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HLA-A24 restricted target antigen CEA immunological epitope #2.
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                                             immunological epitope.
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Query Match Best Local S Matches 8

Similarity 8; Conserv

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Score 43; DB 23; Pred. No. 9.3e+05; 1; Mismatches 0

Length 9; Indels

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Search completed: January 12, 2004, 14:28:24 Job time : 33.25 secs

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1: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:*
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Copyright (c) 1993 - 2004 Compugen Ltd.
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Result No.	Score	Query Match	Query Match Length DB	В	ID	Description
1	48	100.0	9	20	AAY09529	Carcinoembryonic
N	36	75.0	9	18	AAW39723	Human carcina-emb
ω	36	75.0	9	19	AAW77134	CEA synthetic pep
4	36	75.0	9	19	AAW70045	CEA derived HLA-A
ហ	36	75.0	9	20	AAY47655	Immunogenic pepti
6	36	75.0	9	20	AAY09525	Carcinoembryonic
7	36	75.0	9	20	AAY09526	Carcinoembryonic
8	36	75.0	9	21	AAB13749	Peptide fragment
9	36	75.0	9	21	AAB13750	Peptide fragment

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AAUU1136	HAIOLDAN	AAU82064	AAUL4721	AAG84848	AAG84682	AAG62724	AAY47563	AAY47562	AAY47480	AAY47153	AAW70043	AAY39584	AAY49030	AA014704	AAY82882	AAW76240	AAW00680	AAB75854	AAB99681	AAU26560	AAY54173	AAY09528	AAY09527	AAE19089	AAE19088	AAB47917	AAU95893	ABG79073	AAE26805	AAE00463	AAE02673	AAB97818	AAE05124	AAE05123	AAB82776
Unknown peptide #3		program of the Ed	Human cripto prote	HLA-A2	crossbi	m						CTLA-4 VLD CDR1 re	Membrane dipeptida	Human cripto prote	Teratocarcinoma-de	Bacterial periplas	Peptide comprising	Tumour associated	HLA A2 binding CTL	Human Leukocyte An	HLA binding peptid	Carcinoembryonic a	Carcinoembryonic a	HLA-A24 restricted	HLA-A24 restricted	Modified CEA epito	Immunogenic peptid	Human CEA class I	Human HLA-A2.1 res	Human tumour CEA e	Human CEA epitopic	Carcinoembryonic a	Modified carcinoem	Carcinoembryonic a	Carcinoembryonic a

bladder;		inoma: q
20-JUL-1: Carcinoes Carcinoes immune r immune r bladder; adoptive		cst entry) antigen peptide antigen; CEA; h
Carcinoen Carcinoen immune r bladder; adoptive		gen pept gen: CEA
Carcinoembr immune resp bladder; ov		men; CEA
bladder; ov	response; carci	inoma; g
	transfer ther	therapy; autoimmune reaction; immunotherapy.
Homo sapiens. Synthetic.	ns.	
WO9919478-A1.	A1.	
22-APR-1999		
10-OCT-1997;	7; 97US-0061589.	061589.
(USSH) US	DEPT HEALTH	н & нимам
Barzaga E,	Schlom J,	Zaremba
WPI; 1999-3	1999-326544/27.	•

Claim

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Page

53; 72pp;

English

invention describes peptides (A) that

Peptide agonists and antagonists

of carcinoembryonal antigen

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stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (1b) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects, to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent attack on normal but CEA-expressing cells). (Ia) are more active than native sequence (I) and generate a highly specific and systemic anti-CEA response. Cytotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).
peptides AAW39430-W39734 are used in a novel method for the selection immunogenic T-cell peptide epitopes present in polypeptide antigens. T method involves the identification of peptide sequences capable of binding to an HLA (human leukocyte antigen) class I molecule and measuring the binding of this epitope peptide to the HLA class I peptide. The stability of binding of the peptide and MMC (major histocompatablilty complex) class I molecule is measured on intact hum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                T cell epitope; immune response; human leukocyte antigen; HIA (vaccine; immunogenic; major histocompatablilty complex; MHC; B disease; anti-tumour; anti-viral.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or
                                                                                                                      Example 3;
                                                                                                                                                                                             WPI; 1997-549891/50
                                                                                                                                                                                                                          Kast WM,
                                                                                                                                                                                                                                                                                                 23-DEC-1996;
26-APR-1996;
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SCI SEED CAPITAL INVESTMENTS
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9; Conserv
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                                                                                                                                                selecting T cell peptide epitope(s) of HLA class I-peptide complexes on
                                                                                                                                                                                                                          Melief CJM,
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                                                                                                                     Page 85; 109pp; English
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96EP-0201145.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            leukocyte antigen; HLA Class I;
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9.3e+05;
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    by measuring intact B cells

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igen (CEA). (Ia) are
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B cells carrying the MHC molecule at their cell surfaces. The method (be used to select peptide epitopes for generating vaccines against a disease associated with the polypeptide, e.g. cancers or AIDS. The peptide epitopes are especially T-cell peptide peptiopes with strong anti-tumour and anti-viral immune responses. Peptide AAW39723 is derived the human carcino-embryonic antigen (CEA) and has the ability to bind to the human MHC Class I allele HLA-A2.1.
                                                                                                              The peptide epitope AAW (117 m) mere recommend the peptides are are tumour-specific cytotoxic T lymphocyte response. These peptides are are cysteine- depleted mutants of a native disease-specific CTL epitope. The cysteine- depleted CTL epitopes elicit a stronger or more specific CTL response than the native epitope. The epitopes can be used in a disease-specific immunogen to protect a mammal against disease in particular melanomas. The peptides may also be used to screen a sample for the presence of an antigen with the same epitope, or with a different
                                                                           Sequence
                                                                                                                                                                                        The peptide epitope AAW77119-W77138 were created tumour-specific cytotoxic T lymphocyte response.
                                                                                                                                                                                                                               Disclosure; Page 27; 93pp; English.
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                                                                                                    cross-reactive
                                                                                                                                                                                                                                                                     Disease
                                                                                                                                                                                                                                                                                                                      Engelhard VH,
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 1 YLSGACLNL 9
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                                       Similarity
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                                                                            9 AA;
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                           Conservative
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88.9%;
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9.3e+05;
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9.3e+05;
                                                  Length 9;
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                                                                  Query Match
Best Local S
Matches 8
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viral in
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                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                leukocyte antigen; HLA; tumour associated antigen; cancer; en presenting cell; APC; immunogenic peptide; immune disorder; infection; AIDS; hepatitis; bacterial infection; malaria; CEA;
                                                                  Similarity
8; Conserv
 YLSGANLNL 9
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                                                                  Conservative
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88.9%;
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                                                                  Score 36; DB 19;
Pred. No. 9.3e+05;
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RESULT 5
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                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New immunogenic peptides with HLA binding motif, useful in treatment and diagnosis of cancers and viral diseases \,
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (Ib) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent an autoimmune cEA-expressing cells). (Ia) are more active than native sequence (I and generate a highly specific and systemic anti-CEA response. Cycotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).
                               Carcinoembryonic antigen; CEA; human; agonist; antagonist; immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carcinoembryonic antigen; CBA; human; agonist; antagonist; immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer; adoptive transfer therapy; autoimmune reaction; immunotherapy.
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                                                                                                Carcinoembryonic antigen peptide agonist SEQ ID NO:2.
                                                                                                                                     20-JUL-1999
                                                                                                                                                                     AAY09526;
                                                                                                                                                                                                      AAY09526 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 53; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide agonists and antagonists of
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8; Conserva
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               transfer therapy; autoimmune reaction; immunotherapy.
                                                                                                                                                                                                                                                                                       YLSGANLNL 9
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Pred. No. 9.3e+05;
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                                                                                                                                                                                                                                                                                                                       Human; T-cell; immune response; antigen; epitope; B7 family molecule; Leukocyte function-associated antigen-3; LFA-3; Intercellular adhesion molecule-1; ICAM-1; vaccine; immunotherapy; colon polyp; Crohn's disease; ulcerative colitis; breast lesion; tumour; CEA.
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                                                                                                                                                                                                                                                                 Homo sapiens.
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                                                                                                                                                                                                                                                                Human; T-cell; immune response; antigen; epitope; B7 family molecu Leukocyte function-associated antigen-3; LFA-3; Intercellular adhesion molecule-1; ICAM-1; vaccine; immunotherapy;
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                Schlom J,
                                          (USSH )
                                                                                                                 12-NOV-1999;
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                                                                                                                                                                                                                                      polyp; Crohn's disease; ulcerative colitis; breast
r; CEA.
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LFA-3, IC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telomerase reverse transcriptase; hTRT; human; cytotoxic T lymphocyte; major histocompatibility complex; cancer; tumour; human leucocyte antigen; HLA-A2.1; vaccine;
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15-FEB-2001;
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Vaccine for initiating and enhancing a cytotoxic T lymphocyte response, for treating cancers or tumours or for inducing immune response against tumours, comprises a telomerase reverse transcriptase peptide

Example

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Page 12;

52pp;

English.

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  The invention relates to a method of enhancing an immune response against tumour-associated antigens (TAAs), such as GP100 and carcinoembryonic antigen (CEA) in an animal. The method involves priming of the animal with an inducing agent such as tetanus toxoid (TT) or diphtheria toxoid (DT), subsequently followed by administration of an inducing agent-antigen mixture. The method provides the enhancement or augmentation of
                                                                                                                                                                                                                Enhancing immune response to antigen such as tumor antigen for treating cancer in an animal involves administering an inducing agent to the animal followed by administering inducing agent-antigen mixture -
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                                                      The invention relates to a method of enhancing an immune response against tumour-associated antigens (TAAs), such as Eglo and carcinoembryonic antigen (CBA) in an animal. The method involves priming of the animal with an inducing agent such as tetanus toxoid (TT) or diphtheria toxoid (DT), subsequently followed by administration of an inducing agent antigen mixture. The method provides the enhancement or augmentation of the immune response to the antigen and/or improves a vaccination protocol by allowing use of less antigen. The immunisation of the animal with tumour-associated antigen is useful for the prophylactic or therapeutic creatment of cancer. The present sequence is modified carcinoembryonic antigen (CEA) peptide fragment related to the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a method for inducing an immune response, CC in an animal, to a tumour antigen (Ag) comprising administering Ag, or cmucleic acid (I) that encodes it, to a lymphatic site. Cynomolgus monkeys CC (Macaca fascicularis) were injected with a modified form of gpl00 antigen CC (a) into the left inguinal lymph node or (b) subcuttaneously. Both animals of (a) developed a cell-mediated response (indicated by production of collection of collection of the referen-gamma from Tlymphocytes when exposed to gpl00 peptides), but CC only 2 of 4 animals of (b) did so. Also animals in (a) produced a far CC greater antibody response to gpl00. The method is used in immunetherapy of a wide range of cancers through induction of a specific immune CC administered to a lymphatic site, Ag (or (I)) induces a stronger immune cc administered to a lymphatic site, Ag (or (I)) induces a stronger immune cc AAB39730s and AAB39709 represent gpl00 which stimulate interferon CC (IFN)-gamma production; AAH30120 encodes the modified gpl00 protein given in AAB3913; AAH30121 encodes the modified gartigen (CEA) and and antigen in AAB30121 encodes the modified artigen (CEA) and administration by a constant collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and collider and co
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                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                            protein given in AAB97817; and AAB97818 represents a CEA modified antigen peptide, all of which are used in the exemplification of the present
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; cytostatic; antibacterial; antifungal; gene therapy; vaccine;
antiviral; tumour; epitope; glycoprotein; hepatitis B virus; HBV;
immune response; CTL; cytotoxic T lymphocyte; CEA; HLA;
human leucocyte antigen.
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             Human tumour CEA epitopic peptide
                                                                                                                                                                                                                                                                           Sequence
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                                                                    AAE00463;
                                                                                            AAE00463 standard; peptide; 9
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                                                                                                                                                                                                                 The present invention relates to an isolated or purified polynucleotide containing a DNA sequence coding for at least one tumour epicope of a tumour antigen inserted into part of the coding sequence of the middle glycoprotein of the Hepatitis B virus (HBV). The polynucleotide is useful for optionally evaluating cytotoxic responses in the individual's lymphocyte population. It induces an immune response against at least one tumour specific antigen or tissue specific antigen. The vector comprising the polynucleotide induces in vivo, cellular and/or humoral immune response. The composition comprising the polynucleotide induces in vivo, cytotoxic Tlymphocyte (CTL) against one or more antigens or epitopes present on the hybrid protein. The polynucleotide is also useful in gene therapy.

The present sequence is a human tumour CEA epitopic peptide. This peptide elicits strong HLA (human leucocyte antigen)-A2.1-restricted CTL response in mice.
                                                                                                                                         Query Match
Best Local Similarity
Matches 8; Conserv
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                                                                                                                                                                                                               Sequence
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Copyright (c) 1993 - 2004 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

16	15	14	13	12	11	10	9	œ	7	6	ர	4	ω	N	ш	Result No.
13	14	14	14	14	14	14	14	14	15	15	15	15	16	16	18	Score
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Q8KMS3	Q8UTD7	035953	Q9FEC0	Q9TRS0	P82079	Q9PS69	Q8IUB8	Q9X3K1	Q8WNS1	Q9UMC7	P87225	Q63480	Q50832	Q94695	Q9HDS4	ID
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ALIGNMENTS

RESULT Q94695 ID Q AC Q	Que Ber Mat	S T S R R R R R R R R R R R R R R R R R	RESULT Q9HDS4
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01.NOV-1996 (TrEMBLrel. 01, Created)
01.NOV-1996 (TrEMBLrel. 01, Last sequence update)
01.NOV-1996 (TrEMBLrel. 01, Last annotation update)
Intergenic AT-rich DNA sequence (Fragment).
Methanococcus voltae.
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MEDLINE=85230552; PubMed=4006907;
Bollschweiler C., Kuehn R., Klein A.;
Bollschweiler C., Kuehn R., Klein A.;
"Non-repetitive AT-rich sequences are
Methanococcus voltae DNA.";
EMBO J. 4:805-809(1985).
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MEDLINE=96182101; PubMed=8622700;
Benard M., Lagnel C., Pallotta D., Pierron G.;

"Mapping of a replication origin within the prunlinked, abundantly transcribed actin genes o
                             Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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mol. Cell. Biol. 16:968-976(1996)
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an receptor (Fragment).
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NON TER
SEQUENCE
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Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi, Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. Wedler H., Wedler E., Submitted (MAY-1996)
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Yoshikawa T., Makino S., Gao X.M., Xing
Detera-Wadleigh S.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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   SEQUENCE FROM N.A.
Chave K.J., Snell K.,
                                                                                        NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (MAY-1996) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=4932;
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2 (TrEMBLrel. 22,
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to the EMBL/GenBank/DDBJ
      Sanders
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b; Pred. No. 8.3
0; Mismatches
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Pred. No. 8.3e+05;
          Ψ.
                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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Eukaryota; Metazoa; Cetartiods
Mammalia; Eutheria; Cetartiods
Bovidae; Bovinae; Bos.
NCBI_TaxID=9913;
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                                   SEQUENCE FROM N.A.

Urbach E., Chisholm S.W.;

"Genetic diversity in Prochlorococcus
sorted from the Sargasso Sea and Gulf
Limnol. Oceanog. 43:1615-1630(1998).

EMBL; AF070193; AAD23233.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Poloumienko A., Blecher S.;
"Comparison between intron-exon
"Submitted (NOV-1997) to the EMBI
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Prochlorococcus.
NCBI TaxID=1220;
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Eur. J. Immunol. 32:3785-3792(2002).
EMBL; AJ509178. CARAGOGO.
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Schneider W.J.;
"The laying hen exp
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LOW density lipoprotein receptor-related
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; V
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Kurth J., Perniok A., Schmitz R., Iking-Konert C., C.
Thompson K.M., Winkler T., Rajewsky K., Kueppers R.;
"Lack of deleterious somatic mutations in the CD95 g
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Oryctolagus cuniculus (Rabbit).
Oryctolagus Chordata; Craniata; Vertebrata; bu.
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Calcyclin-associated protein, CAP50=CA2+/phospholipid-binding protein
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-!- MASS SPECTROMETRY: MW=729; METHOD=FAB.
                                                                                                                                                                                                                                                                                                                                                                                           Tokumitsu H., Mizutani A., Minami H., Kobayashi R., Hi "A calcyclin-associated protein is a newly identified Ca2+/phospholipid-binding proteins, annexin family.", J. Biol. Chem. 267:8919-8924(1992).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
Limnodynastinae; Limnodynastes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=92250478; PubMed=1533622;
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01-JAN-1998
01-JAN-1998
01-DEC-2001
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"Cell-autonomous Expression of Barley Mla1 Confers Race-specific Resistance to the Powdery Mildew Fungus via a Rar1 Independent Signaling Pathway.";
Plant Cell 0:0-0(2001).
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SEQUENCE
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EMBL; AY009939; AAG37357.1; -.
EMBL; AY009938; AAG37355.1; -.
EMBL; AF523682; AAO16013.1; -.
EMBL; AF523683; AAO16016.1; -.
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Bukaryota; Viridiplantae; Streptophyta; Em
Spermatophyta; Magnoliophyta; Liliopsida;
Triticeae; Hordeum.
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01-MAR-2001 (TrEMBLrel. 16,
01-MAR-2001 (TrEMBLrel. 16,
01-MAR-2003 (TrEMBLrel. 23,
Mlaluorf (MLA13uorf 2de).
                                                                      MGD;
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01-JAN-1998 (TrEMBLrel. 105, Last Sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Truncated voltage-gated sodium channel alpha subunit
                                                                                         Plummer N.W., McBurney M.W., Meisler M.H.;
"Alternative splicing of the sodium channel SCNBA predicts
two-domain protein in fetal brain and non-neuronal cells.";
J. Biol. Chem. 272:24008-24015(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q9FEC0
                                                                                                                                       MEDLINE=97442476; PubMed=9295353;
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U97672; AAB80914.1; -.
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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WPI; 1999-326544/27.		Barzaga E, Schlom J, Zaremba S;		(USSH) US DEPT HEALTH & HUMAN SERVICES.		10-OCT-1997; 97US-0061589.		22-SEP-1998; 98WO-US19794.		22-APR-1999.		WO9919478-A1.		Synthetic.	Homo sapiens.		adoptive transfer therapy; autoimmune reaction; immunotherapy.	bladder; ovarian; lung; prostatic; T cell proliferation; cancer;	immune response; carcinoma; gastrointestinal; breast; pancreatic;	Carcinoembryonic antigen; CEA; human; agonist; antagonist;		Carcinoembryonic antigen peptide agonist SEQ ID NO:3.		20_JIII1000 (first entry)		AAY09527:	AAY09527 standard; peptide; 9 AA.	AAY09527	T.T. 1

The present invention describes peptides (A) that comprise agonists (Ia) or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or

Claim

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English

Peptide agonists and antagonists of carcinoembryonal antigen

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                                           or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (Ib) are used to inhibit CEA-specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Carcinoembryonic antigen; CEA; human; agonist; antagonist; immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer;
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                                                                                                                                                                                                 The present invention describes peptides (A) that comprise agonists (Ia) or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are
                                                                                                                                                                                                                                                                                                                                                        Peptide agonists and antagonists of
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responses, e.g. in vaccinated subjects, to prevent an
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Costimulatory molecules have important roles in T-cell activation and therefore the immune response. The present invention relates to crecombinant vectors which comprise of foreign nucleic acid sequences. CC encoding at least three costimulatory molecules: a B7 family molecule, cleukocyte function-associated antigen-3 (LFA-3, human CD58) and CC Intercellular adhesion molecule-1 (ICAM-1, CD54) and optionally a foreign cgene encoding a target antigen or immunological epitope. The present CC gene encoding a target antigen used in the present invention. The present invention would be useful for providing an enhanced immune CC present invention would be useful for providing an enhanced immune CC invention may therefore be useful in immunotherapy for treating or preventing diseases caused by viruses, bacteria, protozoans, parasites, CC premalignant cells and tumour cells. The recombinant vector can be used CC to treat or prevent preneoplastic or hyperplastic states such as colon CC polyps, Crohn's disease, ulcerative colitis and breast lesions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel recombinant vector useful as immunogens and vaccines for stimulating and enhancing immunological responses to target cells and antigens expresses multiple co-stimulatory molecules such as B7-1,
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                                                                                                                                                                                                                                                                          The invention relates to a method of enhancing an immune response against tumour-associated antigens (TAAs), such as GP100 and carcinoembryonic antigen (CRA) in an animal. The method involves priming of the animal with an inducing agent such as tetanus toxoid (TT) or diphtheria toxoid (DT), subsequently followed by administration of an inducing agent-antigen mixture. The method provides the enhancement or augmentation of the immune response to the antigen and/or improves a vaccination protocol by allowing use of less antigen. The immunisation of the animal with tumour-associated antigen is useful for the prophylactic or therapeutic treatment of cancer. The present sequence is modified carcinoembryonic antigen (CRA) peptide fragment related to the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Emtage P,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JAN-2001; 2001WO-CA00005
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9.3e+05;
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RESULT 6 AAB47917 ID AAB4

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                                                                                                                                                                                                                           The present invention describes a method for inducing an immune response, CC in an animal, to a tumour antigen (Ag) comprising administraring Ag, or CC nucleic acid (I) that encodes it, to a lymphatic site. Cynomolgus monkeys CC (Macaca fascicularis) were injected with a modified form of gpl00 antigen CC of (a) into the left inguinal lymph node or (b) subcutaneously. Both animals CC of (a) developed a cell-mediated response (indicated by production of CC interferon-gamma from T lymphocytes when exposed to gpl00 peptides), but CC only 2 of 4 animals of (b) did so. Also animals in (a) produced a far CC greater antibody response to gpl00. The method is used in immune CC greater antibody response to gpl00. The method is used in immune CC endinistered to a lymphatic site, Ag (or (I)) induces a stronger immune CC administered to a lymphatic site, Ag (or (I)) induces a stronger immune CC administered to a lymphatic site, Ag (or (I)) induces a stronger immune CC ABB7815 represent peptides derived from gpl00 which stimulate interferon CC (ITN)-gamma production; AAH20120 encodes the modified gpl00 protein given in AAB97817; and AAB97818 represents a CEA modified antigen constituention.
Query Match
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                                                                                                                                         Sequence
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07-AUG-2000; 2000US-0223325
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Inducing immune response to tumor antigen, useful in immunotherapy
cancer, by administering the antigen to a lymphatic site -
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                                                                                                                                                                                                             invention.
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       Conservative
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                                      95.6%;
   Score 43; DB Pred. No. 9.3e 1; Mismatches
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       DB 22; 1
9.3e+05;
thes 0;
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                                                                   Length 9;
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RESULT 7
AAE19089
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Matches 8
                                                                                                                                                                                                                                                                This sequence represents a modified CAP-1 epitope of carcinoembryonic antigen (CEA) which was used as part of the CEA agonist polypeptide of the invention. The modification of position 6 of this peptide from Asp to Asm increases its immunogenicity. The CEA agonist polypeptide of the invention, or DNA encoding it, are useful for:

(1) inducing an immune response in an animal directed against a CEA protein or fragment, CEA agonist, a CEA epitope, a modified CEA epitope, cells expressing or binding a CEA protein or fragment; and (ii) inhibiting a CEA epitope expressing carcinoma cell, which is a gastrointestinal, breast, pancresatic, bladder, ovarian, lung or prostate carcinoma cell in a patient, hence is useful for manufacture of a medicament for the treatment of cancer.
             21-MAY-2002
                                        AAE19089;
                                                                AAE19089 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carcinoembryonic antigen agonist polypeptide for inducing an immune response in animal against antigen and for inhibiting an epitope antigen expressing carcinoma cell, comprises a modified antigen epitope
                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-206189/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Berinstein N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JUL-2000; 2000US-222043P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAP-1; epitope; carcinoembryonic antigen; CEA; agonist; immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Modified CEA epitope, CEA(6D)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB47917;
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                                                                                                                                                            1 YLSGADINL 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cancer.
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/label= N6D
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            entry)
                                                                                                                                                                                                   95.6%;
                                                                                                                                                                                     Score 43; DB 23;
Pred. No. 9.3e+05;
1; Mismatches 0
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                                                                                                                                                      The present invention relates to a pharmaceutical composition comprising CC a replication-defective virus (RDV) encoding granulocyte-monocyte-colony comparising factor (GM-CSF). The invention is useful for enhancing cell-mediated or humoral immune response in an individual, by enhancing cell-migration of APC expressing CDIIC+/I-Ab+, major histocompatibility CC complex (MHC) class II, at an injection site, regional lymph node at a ctivation, interleukin (II)-2, interferon (IFN) gamma or tumour necrosis factor (TNF)-alpha production or their combinations. The composition CC enhances an antigen-specific T-cell response in an individual to a target antigen or its immunological epitope and an anti-tumour response in an individual to a target colorectal or metastatic tumour, neck, breast, pancreatic, prostate, CC colorectal or metastatic tumour or melanoma, or metastatic breast skin creating from chemotherapy, corticosteroid therapy, irradiation or an infection, by raising the neutrophil count to normal levels and for treating cytopenias in patients with myeloidysplastic syndrome in CC combination with erythropoletin, by increasing neutrophil count and cerythroid precursors. The composition enhances immune response to composition such as DPT, Td, DtaP, Hib, DtaP-Hib, MMR, Hepatitis A, CC hepatitis B, lyme's disease, influenza, tetravalent meningococcal combination patients (LIA)-restricted target tumour antigen cc immunological enitore.
                                                                         Query Match
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Matches 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human leukocyte antigen; HLA; pharmaceutical composition; target antigen; immunological epitope; replication-defective virus; RDV; immune response; chemotherapy; granulocyte-monocyte-colony stimulating factor; cytostatic; GM-CSF; MHC; major histocompatibility complex; tumour; head; pancreatic; neck; breast; prostate; colorectal; melanoma; myeloidysplastic syndrome; metastatic breast skin lesion; corticosteroid therapy; erythropoietin; cytopenia; neutropenia; vaccine; immunostimulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Composition for enhancing immune responses, particularly anti-tumor responses and treating neutropenia, cytopenia, comprises replication-defective virus encoding granulocyte-monocyte-colony
                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 stimulating factor
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(THER-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HLA-A24 restricted target antigen CEA immunological epitope
                                                                                                                                                                                          .mmunological
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1 YLSGADINL
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1 YLSGADLNL
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                                                                                             Similarity
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                                                                             Conservative
                                                                                                                                                    AA
                                                                                                                                                                                          epitope
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                                                                                             95.6%;
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                                                                           Score 43; DB
Pred. No. 9.3e
1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                     or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy (Ib) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects, to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent an autoimmune reaction to cancer immunotherapy (i.e. to prevent attack on normal but CEA-expressing cells). (Ia) are more active than native sequence (I) and generate a highly specific and systemic anti-CEA response. Cytotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 5; Page 53; 72pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-326544/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barzaga E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carcinoembryonic antigen; CEA; human; agonist; antagonist; immune response; carcinoma; gastrointestinal; breast; panoreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer; adoptive transfer therapy; autoimmune reaction; immunotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carcinoembryonic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide agonists and antagonists of carcinoembryonal antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-OCT-1997;
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                              T cell epitope; immune response; human leukocyte antigen; HLA Class I; vaccine; immunogenic; major histocompatablilty complex; MHC; B cell;
                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes peptides (A) that comprise agonists (Ia) or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-SEP-1998;
                  disease; anti-tumour; anti-viral.
                                                                            Human carcina-embryonic antigen (CEA) peptide (pos. 571-579).
                                                                                                                11-JUN-1998
                                                                                                                                                                              AAW39723 standard; peptide; 9 AA
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                                                                                                                                                                                                                                                                                             1 YLSGADINL 9
                                                                                                                                                                                                                                                                                                                           8; Conserva
                                                                                                                                                                                                                                                             YLSGANINL 9
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                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                            ΑA;
                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antigen peptide agonist SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                            88.9%;
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                                                                                                                                                                                                                                                                                                                             Score 40; DB Pred. No. 9.3e
                                                                                                                                                                                                                                                                                                                                            9.3e+05;
                                                                                                                                                                                                                                                                                                                                                             DB 20;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Method of selecting T cell peptide epitope(s) - by meas stability of HLA class I-peptide complexes on intact B
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26-APR-1996;
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                                                                                                                                                                                                                                                                                                                     Tyrosinase; tyrosinase cytotoxic lymphocyte response, cytotoxic T lymphocyte; cysteine-depleted; melanoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Page 85; 109pp; English
                                                                                                                                                                                                                                                                                                                                                                                                       CEA synthetic peptide epitope 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW77134 standard;
                                                     30-JAN-1997;
                                                                                                                                                          06-AUG-1998
                                                                                                                                                                                                                   WO9833810-A2
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(UYVI-) UNIV VIRGINIA PATENT FOUND.
                                                                                                        29-JAN-1998;
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Matches 7
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                                                                                                                                                    production of antigen-specific cytotoxic T cells - by
immunogenic peptide(s) from antigen that binds class
histocompatibility complex molecules with pre-treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytotoxic T lymphocyte; CTL; major histocompatibility complex; MHC; human leukocyte antigen; HLA; tumour associated antigen; cancer; antigen presenting cell; APC; immunogenic peptide; immune disorder; viral infection; AIDS; hepatitis; bacterial infection; malaria; CEA;
                                                                                                                                                                                                                                                                                                                                                                                                                            31-JAN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HLA-A2.1 binding peptide 2 (residues 605-613).
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Pred. No. 9.3e+05;
                                                                                                                                                                                                                                                                                                                     Southwood
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Sequences shown in AAW70044 to AAW70052 represent peptides carcinoembryonic antigen (CEA). The peptides can bind to a

derived human

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RESULT 12
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Best Local
AAY45390 to AAY48214 represent specifically claimed immunogenic peptides having a human major histocompatibility complex (MHC) Class I (also known as human leukocyte antigen (HLA)) binding motif. The immunogenic peptides can bind to a specific HLA allele (i.e. HLA-A subtypes HLA-A2.1, A1, A3.2 or A24.1 or HLA-B or C) and induce a cytotoxic T cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human leukocyte antigen; binding; immunogenic; glycoprotein; MHC; HLA immune response; T cell activation; major histocompatibility complex; cytotoxic T lymphocyte; CTL; tumour rejection; viral infection; cance prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma;
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                                                                                                                                immunogenic peptides with HLA binding motif, diagnosis of cancers and viral diseases -
                                                                                                 1; Page 118; 150pp; English.
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CC Cytotoxic T lymphocytes (CTLs) which destroy antigen-bearing cells are
CC controlly induced by an antigen in the form of a peptide fragment bound
CC to a HLA molecule, rather than the intact foreign antigen itself, and
CC are particularly important in tumour rejection and in fighting viral
CC infections. The peptides are therefore useful therapeutically to treat
CC or prevent viral infections and cancers in mammals (especially humans)
CC e.g. prostate cancer, hepatitis B and C, AIDS, and renal carcinoma.
CC They can be administered as vaccines to elicit an immune response in
CC individuals susceptible or otherwise at risk of viral infection or
CC cancer, or used to treat chronic or acute conditions. They are also
CC useful diagnostically, and can be used to induce a cytotoxic T cell
CC response, by contacting a cytotoxic T cell with the peptide e.g. to
CC produce CTLs ex vivo for infusion back into a patient. The
CC polynucleotides encoding the immunogenic peptides are also useful
CC therapeutically and for immunisation as above.
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                                    The present invention describes peptides (A) that comprise agonists (Ia) or antagonists (Ib) of human carcinoembryonal antigen (CEA). (Ia) are used in vaccines to kill or inhibit carcinoma cells that express CEA or its epitopes, particularly for treating gastrointestinal, breast, pancreatic, bladder, ovarian, lung or prostatic carcinoma. They can also be used to proliferate T cells, e.g. from vaccinated subjects, for use in adoptive transfer therapy. (Ib) are used to inhibit CEA-specific immune responses, e.g. in vaccinated subjects, to prevent an autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immune response; carcinoma; gastrointestinal; breast; pancreatic; bladder; ovarian; lung; prostatic; T cell proliferation; cancer; adoptive transfer therapy; autoimmune reaction; immunotherapy.
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                     Costimulatory molecules have important roles in T-cell activation and therefore the immune response. The present invention relates to recombinant vectors which comprise of foreign nucleic acid sequences encoding at least three costimulatory molecules: a B7 family molecule, Leukocyte function-associated antigen-3 (LFA-3, human CD58) and Intercellular adhesion molecule-1 (ICAM-1, CD54) and optionally a foreign gene encoding a target antigen or immunological epitope. The present sequence is one such target antigen used in the present invention. The present invention would be useful for providing an enhanced immune response to the present target antigen. The vector of the present invention may therefore be useful in immunotherapy for treating or preventing diseases caused by viruses, bacteria, protozoans, parasites, preventing diseases caused by viruses, bacteria, protozoans, parasites, preventing cells and tumour cells. The recombinant vector can be used to treat or prevent preneoplastic or hyperplastic states such as colon polyps, Crohn's disease, ulcerative colitis and breast lesions.
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Leukocyte function-associated antigen-3; LFA-3;
Intercellular adhesion molecule-1; ICAM-1; vaccine; immunotherapy;
colon polyp; Crohn's disease; ulcerative colitis; breast lesion;
tumour; CEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CEA-expressing cells). (Ia) are more active than native sequence (I) and generate a highly specific and systemic anti-CEA response. Cytotoxic T cells generated recognize both (Ia) and native CEA epitopes. The present sequence represents a specifically claimed example of (Ia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel recombinant vector useful as immunogens and vaccines for stimulating and enhancing immunological responses to target ceantigens expresses multiple co-stimulatory molecules such as B
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RESULT 15
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                                                                                                          The present sequence is that of a carcinoembryonic antigen peptide comprising amino acid residues 571-579. The peptide was used as a reference peptide in comparison with human telomerase reverse transcriptase (hTRT) HLA-A2.1 restricted peptide p540 (see C transcriptase (hTRT) HLA-A2.1 binding/stabilisation assay. The induction of CTL responses in vitro and in vivo, and the susceptibility to 1ysis of tumour cells of various origins by hTRT CTL suggest that hTRT could serve as a universal cancer vaccine for humans. A claimed universal vaccine for treating tumours of any origin c comprises at least 1 hTRT peptide. The peptide is 7-15 amino comprises at least 1 hTRT peptide. The peptide is 7-15 amino the major histocompatibility complex. Also claimed is a method for inducing and enhancing a CTL response against cancer cells, involving cancer cells with the pulsed leucocytes. A method for targeting cancer cells with the pulsed leucocytes. A method for targeting concer cells is also claimed, and involves administering a CTL to tumour cells is also claimed, and involves administering a CTL response against cancer cells with the pulsed leucocytes. A method for targeting concer cells with the pulsed leucocytes. A method for targeting concerns the pulsed leucocytes and involves administering a concerns petide to a mammal, especially a cancer patient.
Query Match 84.4%; Score 38; DB 22; Length 9; Best Local Similarity 77.8%; Pred. No. 9.3e+05; Matches 7; Conservative 2; Mismatches 0; Indels
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telomerase reverse transcriptase; hTRT; human; cytotoxic Tlymphocyte; major histocompatibility complex; cancer; tumour; human leucocyte antigen; HLA-A2.1; vaccine; carcinoembryonic antigen.
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15-FEB-2001; 2001US-0182685.
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Search completed: January 12, 2004, 14:28:23
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P87225 saccharomyc
Q9try3 sus sp. ins
Q42564 fugu rubrip
Q9x3k1 prochloroco
P82079 limnodynast
Q8kms3 klebsiella
Q9y4x6 homo sapien
Q0y2831 oryctolagus
Q47063 escherichia
Q99887 homo sapien
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Q66113 PRELIMINARY;
Q66113;
01-NOV-1996 (TrEMBLrel. 01,
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Proc. Natl. Acad. Sci. U.S.A. 88:8696-8699(1991)
EMBL; S58152; AAB19972.1; -.
EMBL; S58145; AAB19972.1; JOINED.
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"Mutation of the KIT (mast/stem cell growth factor receptor)
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MEDLINE=92020918; PubMed=1717985;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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100.0%; Pred. No. 8.3e+05;
Live 0; Mismatches 0;
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01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
LOW density lipoprotein receptor-related protein (F)
Gallus gallus (Chicken).
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MEDLINE-96124520; PubMed-8560786;
Borja M., Sanchez F., Rowhani A., Bruening G.,
"Long, nearly identical untranslated sequences
"Long, nearly identical untranslated sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "The laying hen expresses two different receptor-related proteins.";
J. Biol. Chem. 266:19079-19087(1991).
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Schneider W.J.;
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasiani
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01-DEC-2001 (TrEMBLrel.
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Saccharomyces cerevisiae (Baker's yeast)
Eukaryota, Fungi, Ascomycota, Saccharomycotina, Sacci
Saccharomycetales, Saccharomycetaceae, Saccharomyces
   Fugu rubripes (Japanese pufferfish) (Takifugu rubripes).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neotteleost
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=92049376; PubMed=1719383;
Shimasaki S., Gao L., Shimonaka M.,
"Isolation and molecular cloning of
                                                                                                                        SCN8A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                          Truncated voltage-gated
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Acanthopterygii;
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EMBL/GenBank/DDBJ
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Pred. No.
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insulin-like
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01-MAY-2000
01-MAY-2000
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EMBL; AF070193; AAD23233.1;
NON_TER 1
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MEDLINE=97442476; PubMed=9295353;

Plummer N.W., McBurney M.W., Meisler M.H.;

Plummer N.W., McBurney M.W., Meisler M.H.;

"Alternative splicing of the sodium channel SCN8A predicts a "Alternative splicing of the sodium channel SCN8A predicts a two-domain protein in fetal brain and non-neuronal cells.";

two-domain protein in fetal brain and non-neuronal cells.";

J. Biol. Chem. 272:24008-24015(1997).

EMBL; U97673; AAB80916.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Genetic diversity in Prochlorococcus "Genetic diversity in Prochlorococcus sorted from the Sargasso Sea and Gulf sorted from the Sargasso 1615-1630(1998).
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NCBI_TaxID=31033;
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01-NOV-1999
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SEQUENCE, AND MASS SPECTRO TISSUE=TIBIAL GLAND; Raftery M.J., Bradford A.M "Peptides from Australian"
                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
Limnodynastinae; Limnodynastes.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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m Australian frogs. The str
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01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
Hypothetical 1.0 kDa protein (Fragment).
Cicer arietinum (Chickpea) (Garbanzo).
Eukaryota; Viridiplante; Streptophyta; Embryophyta; Trac
Spermatophyta; Magnoliophyta; eudicotyledons; core eudice
eurosids I; Fabales; Fabaceae; Papilionoideae; Cicereae;
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L-7 fragment. (Fragment).

Oryctolagus cuniculus (Rabbit).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
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                                                                         Res. Microbiol. 152:811-822(2001).
EMBL; AJ302776; CAC82975.1; -.
SEQUENCE 7 AA; 608 MW; 6DC1B5B
                                                                                                                                                  "Mercury resistance transposons of Gram-negative bacteria and their classification.";
                                                                                                                                                                                                                                                                                                                                                                          Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Klebsiella.
NCBI_TaxID=143776;
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                                                                                                                                                                                                  MEDLINE=21604134; PubMed=11763242;
Mindlin S.Z., Kholodii G.Y., Gorlenko Z.M.,
Minakhin L.S., Kalyaeva E.S., Kopteva A.V.,
Yurieva O.V., Nikiforov V.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U97672; AAB80914.
MGD; MGI:103169; Scn8a.
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"Alternative splicing of the sodium channel SCN8A predicts a
two-domain protein in fetal brain and non-neuronal cells.";
J. Biol. Chem. 272:24008-24015(1997).
EMBL, U97672; AAB80914.1; -.
                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. STRAIN=LS13-39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Klebsiella sp. LS13-39
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Mammalia; Eutheria;
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00.JUL-1997 (TrEMBLrel. 04, Created)
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01.JUL-1997 (TrEMBLrel. 19, Last annotation update)
01.DEC-2001 (TrEMBLrel. 19, Last annotation update)
Pro alpha 1 type III collagen protein (Fragment).
Oryctolagus cuniculus (Rabbit).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
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Q9Y4X6;
01-NOV-1999
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Nuclear LIM
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EMBL; S83371; AAD14433.1; -.
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                                                                                                                                                                                             MEDLINE=96377339; PubMed=8783186;
Metsaranta M., Kujala U.M., Pelliniemi
                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                   Vuorio E.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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Mammalia; Eutheria;
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MEDLINE=20108806; PubMed=10640831;
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Primates;
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ID Q47063
PRELIMINARY; PRT; 9 AA.
AC Q47063;
DT Q47063
PT 01-NOV-1996 (TERMBLrel. 01, Last sequence update)
DT 01-NOV-1996 (TERMBLrel. 01, Last sequence update)
DT 01-NOV-1996 (TERMBLrel. 08, Last annotation update)
DT 01-NOV-1996 (TERMBLrel. 08, Last annotation update)
DE UF 1.

OS Escherichia coll.

OS Escheria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Escherichia.

OX NCBI_TAXID=562;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=W;
RX MEDLINE-85215599; PubMed=2907841;
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